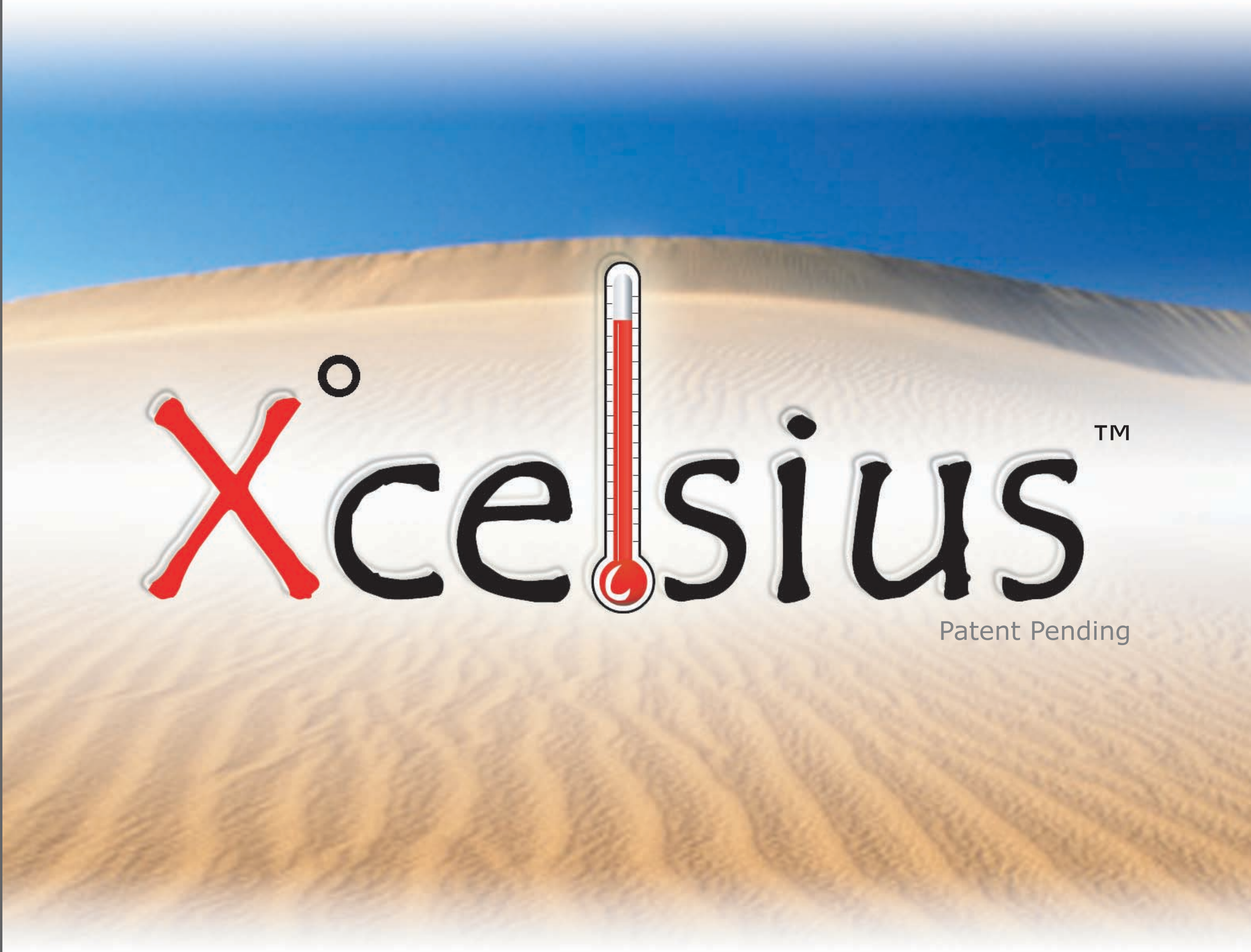
User Guide

version 3.0



INFOMMERSION™

Version 3.0

XCELSIUS™

Xcelsius
Version 3.0
User Guide

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Xcelsius V 3.0

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I

User's Guide

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1

Chapter 1: Installing Xcelsius

This chapter contains the following sections:

Hardware and Software Requirements . . . . page 4
Installation and Activation . . . . .page 5

Welcome to Xcelsius, a leading edge Microsoft Windows application that brings data to life!

Using breakthrough technology, Xcelsius bridges the gap between data analysis and visual presentations, empowering users of all proficiencies to create visually stunning interactive reports and applications.

With Xcelsius, users can communicate data in a clear and powerful style that's appealing to the mind and to the eye.

Xcelsius is intuitive enough for beginners and versatile enough for advanced users. Most importantly, it makes the process of generating reports and applications fun, without requiring users to learn arcane programming languages. With Xcelsius, simply pointing and clicking your mouse can create rich interactive presentations. Your only limitation is your imagination.

Xcelsius offers tight integration with Microsoft Corporation's ubiquitous Office products. This tight integration lets you attach your reports to Microsoft Outlook e-mail messages or embed them into PowerPoint slides using just a single mouse click!

Hardware and Software Requirements

Minimum Recommended Hardware	• PC with Pentium 3 or equivalent processor • 128MB of RAM
Operating System:	Windows 2000 or Windows XP
Microsoft Office	Office 2000, Office XP, or Office 2003

Installation and Activation

This section will go over the steps needed to install and activate you copy of Xcelsius.

Installation

Just double click on the installation program and it will take you through the installation steps. Xcelsius requires that you install the latest version of the Flash 7 Player, this is an option in the install program (it is checked by default) so make sure you leave this option checked unless you are absolutely sure that you have the latest version of the Flash Player installed.

Note. You must install with Xcelsius under a user account that has Administrator privileges.

Activation

One license of Xcelsius will allow you to run the application on one machine. Activation is the process which establishes which machine will host the application.

If you have purchased Xcelsius you will first need to register with the serial number provided to you. Once the registration has been confirmed, the application will prompt you to activate.

To complete activation, you will be given the option to activate automatically if you have an internet connection, or you may choose to activate manually by phone or email. An activation wizard will walk you through the manual activation process.

Note. The application will run several times before you are required to activate.

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Chapter 2:
Getting to Know Xcelsius

This chapter contains the following sections:

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Using the Canvas . . . . page 30
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What's New in Xcelsius 3.0

Xcelsius 3.0 contains exciting new features that allow you to create rich interactive presentations.

Xcelsius Standard Edition

Xcelsius Standard Edition has several new features that make it even easier to create dynamic models based on your Excel data.

- **Global Styles** – Using the Global Style functionality, you can change the appearance of your entire model with a single click.
- **Edit Multiple Components** – Xcelsius 3.0 introduces the ability to select multiple components and edit their parameters.
- **European Map** – A map of Europe has been added that enables selector functionality using European countries as an index.
- **Input Text Components** – A single line Input Text and a multiple line Input Text Area component have been added to allow you gather input data from your model users.
- **New Charts** – Xcelsius now includes a Combination Column/Line chart as well as Stacked Bar and Stacked Column charts.
- **Support for Named Ranges** – Function support has been enhanced so that Named Ranges can be passed as arguments to formulas.
- **Expanded Excel Function Support** – Numerous functions have been added to Xcelsius 3.0.
- **Enhanced Selector Behavior** – The Selectors (List Box, Menu, etc.) now allow you to set the default selected item at design time.

Xcelsius Professional Edition

All of the features listed above for Xcelsius Standard Edition are available in Xcelsius Professional Edition. In addition, there are several new features that allow you to use Xcelsius to create powerful applications to be used in an enterprise environment.

- **XML Data Button** – The XML Data Button allows you to submit data to a web server as well as connect to a web server to bring data into your models.
- **Enhanced Web Service Connectivity** – The Use Web Service option has been enhanced to allow you to link your URL to a cell in a spreadsheet. Xcelsius models have also been improved so that they can refresh static data sources when your model loads.
- **Real Time Collaboration** – Xcelsius 3.0 introduces Collaboration functionality which enables you to create models that allow multiple users to share and present data with each other in real-time.
- **Remote Scenarios** – This Collaboration feature also allows your users to save and load Scenarios to a central location so that application data can be shared by multiple users.

Understanding the Xcelsius System

Xcelsius combines two of the most widely used software applications in the world:

- Microsoft Excel
- Macromedia Flash Player

Microsoft Excel is one of the most popular software programs today. It is a member of the Microsoft Office family of products and is used daily by millions of people around the world to create reports.

Macromedia Flash Player is widely used to view applications developed in Macromedia Flash. According to Macromedia, there are roughly 516 million computers with the Flash Player (March 2003).

With these figures, it is almost a certainty that your personal computers at home and at the office already have Microsoft Excel and Macromedia Flash Player installed. The synergy derived by integrating these two widely deployed applications allows Xcelsius to leverage years of sophisticated programming and proven IT and business technologies. The result is a winning combination that raises the standard in terms of power and usability.

What Skills Do I Need?

Xcelsius is uniquely designed to be easy and enjoyable to use. Since its underlying technology is Microsoft Excel, the only skills a user needs to create striking visual effects in their reports is a basic understanding of how Excel works. No additional training is required!

How Does Xcelsius Differ from Traditional Reporting Applications?

Xcelsius complements and enhances traditional reporting applications by allowing users to participate in the report-creation process and analysis. Xcelsius complements all types of Portal initiatives, Business Intelligence programs, Executive Dashboards, Balanced Scorecard projects, Marketing Reports, and day-to-day reporting and presentation requirements.

How Does It Work?

Xcelsius is a remarkably powerful solution that stands out for its ease of use. Just import an Excel file into Xcelsius, create the desired model, and publish it.

Let’s See an Example

The following example shows how easily Xcelsius can transform a dull and lifeless report into one that is visually stunning and inviting to read. In this example, assume that John has an Excel file with the latest regional sales numbers. Also, assume that John wants to transform his Excel file into an impressive-looking “dynamic report” that can be distributed to online and offline employees.

1. John imports the Excel file into Xcelsius and creates a dynamic report. Since the file is John's own Excel file, he knows exactly what he needs to show and how he wants to show it, without requiring any assistance from the company's IT department.

2. John decides to create a report that contains the numbers by each sales representative and compares the numbers to the target goals. To accomplish this, he adds a “what-if” scenario to his dynamic report.

3. John compiles the dynamic report, publishes it on his corporate portal page, and e-mails it to recipients in the office and on the road. Unlike previous reports that were hardly reviewed, John feels confident that his visually attractive report will receive the attention it deserves.

For a general, detailed description about how Xcelsius works, see “How Xcelsius Works” on page 16.

How Do the Reports Look?

Reports created with Xcelsius can have any type of corporate or personal look. Reports are also fully compatible with Microsoft Power Point, HTML, and Portals.

Xcelsius reports conform to SWF file format. SWF is the vector-based graphics format designed to run in the Flash Player. The SWF file format is ideal for presenting vector-based interactive and animated graphics. Because a SWF file is vector-based, its graphics are scalable and play back smoothly on any screen size and across multiple platforms. In addition, a vector-based file usually has a smaller file size than a bitmap animation.

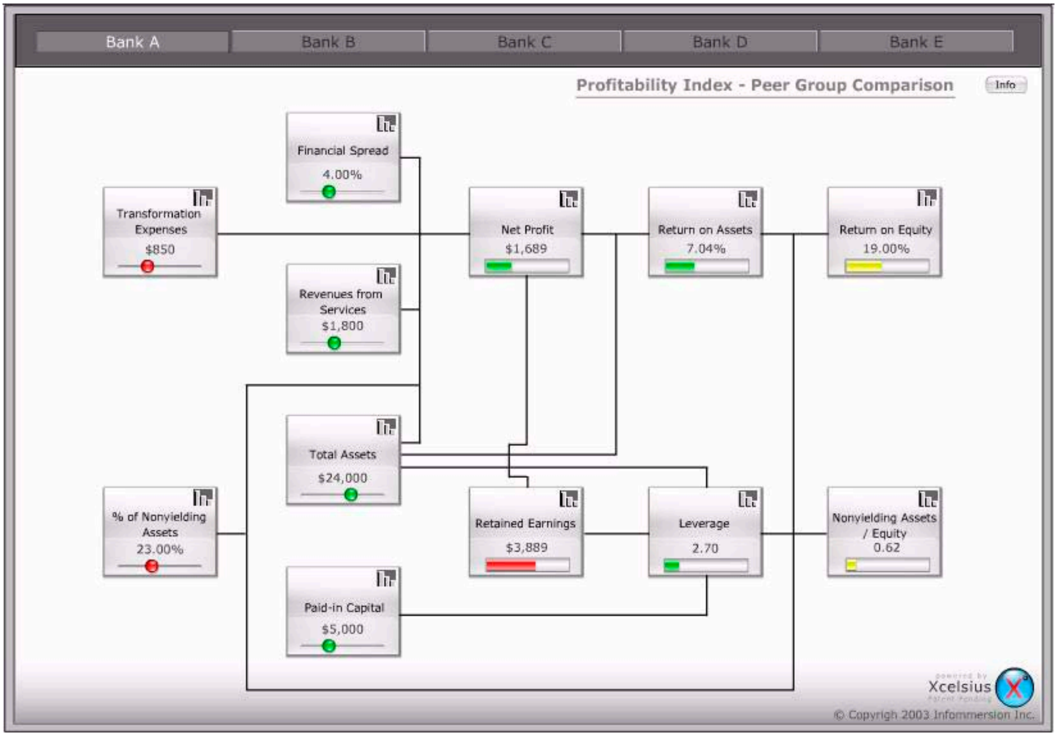
The following figures show examples of models created with Xcelsius.

Example 1

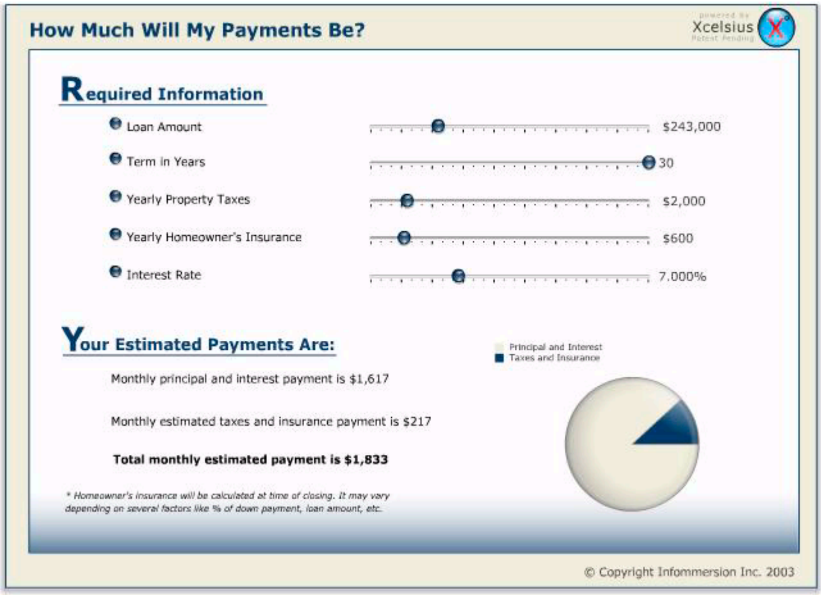
This model shows the return-on-equity (ROE) for a financial institution against its peer group performance. The alert colors are triggered, comparing the selected bank against the peer group average.

The model uses the six major areas in which financial executives can interact to improve the ROE. From left to right, the model allows executives to create “what if” scenarios by adjusting transformation expenses, financial spread, revenues from services, percentage of non-yielding assets, total assets, and paid capital.

With each variation, the model calculates the expected result on all other accounts   including reinvestment of earnings, ROA, and ROE   while at the same time comparing each account with its peer group performance. This comparison is represented by the universal colors red, yellow, and green. By placing the pointer over the chart icon, the model displays a historical chart of the selected variable.


Bank A
Bank B
Bank C
Bank D
Bank E
Profitability Index - Peer Group Comparison
Info
Financial Spread
4.00%
Transformation Expenses
$850
Revenues from Services
$1,800
Net Profit
$1,689
Return on Assets
7.04%
Return on Equity
19.00%
Total Assets
$24,000
% of Nonyielding Assets
23.00%
Retained Earnings
$3,889
Leverage
2.70
Nonyielding Assets / Equity
0.62
Paid-in Capital
$5,000
powered by Xcelsius
© Copyrigh 2003 Infommersion Inc.

Example 2 The following model was created to calculate the monthly payment for a home loan. Users can simply adjust the input values by moving the sliders. The calculator dynamically changes and displays the new values.



How Much Will My Payments Be?

Required Information

Loan Amount	$243,000
Term in Years	30
Yearly Property Taxes	$2,000
Yearly Homeowner's Insurance	$600
Interest Rate	7.000%

Your Estimated Payments Are:

Monthly principal and interest payment is $1,617

Monthly estimated taxes and insurance payment is $217

Total monthly estimated payment is $1,833

** Homeowner's insurance will be calculated at time of closing. It may vary depending on several factors like % of down payment, loan amount, etc.*

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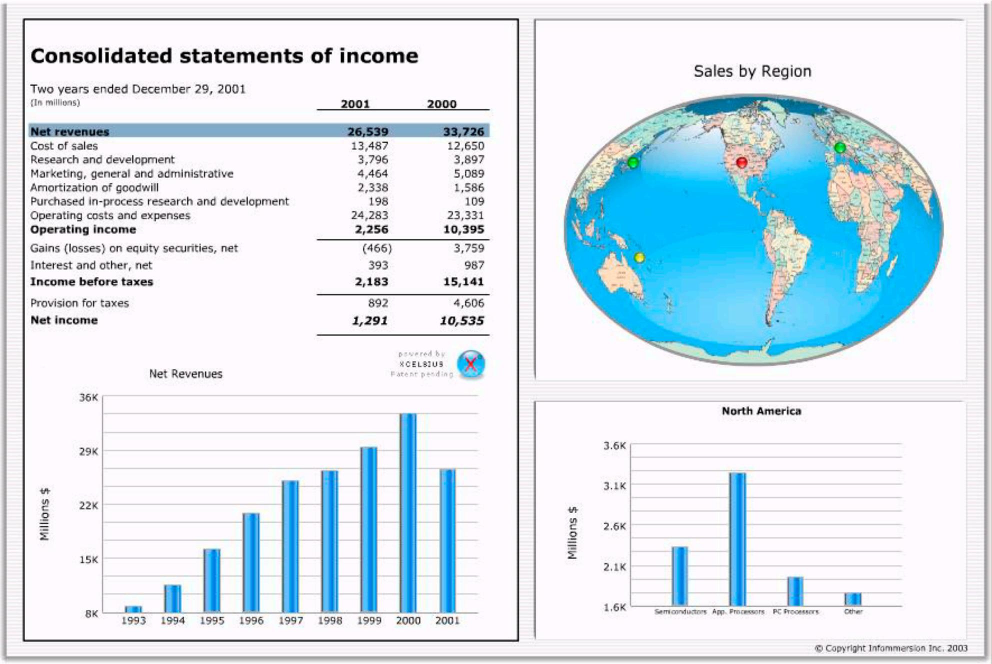
Example 3 The following model represents a dynamic financial statement report. It shows the traditional Statements of Income. However, when a user clicks on an account, the model shows the historical data organized by region or as a comparison against competitors. This example provides a simple and elegant way to communicate your message.



Consolidated statements of income

Two years ended December 29, 2001
(In millions)

	2001	2000
Net revenues	**26,539**	**33,726**
Cost of sales	13,487	12,650
Research and development	3,796	3,897
Marketing, general and administrative	4,464	5,089
Amortization of goodwill	2,338	1,586
Purchased in-process research and development	198	109
Operating costs and expenses	24,283	23,331
Operating income	**2,256**	**10,395**
Gains (losses) on equity securities, net	(466)	3,759
Interest and other, net	393	987
Income before taxes	**2,183**	**15,141**
Provision for taxes	892	4,606
Net income	***1,291***	***10,535***

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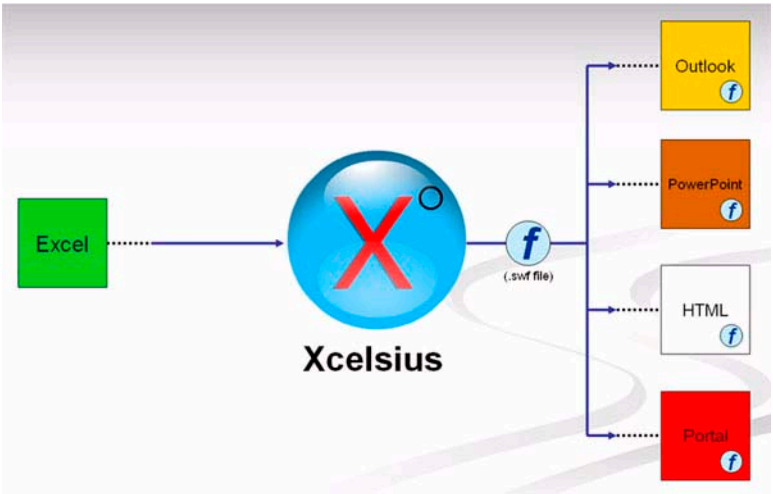
How Xcelsius Works

Creating an Xcelsius report is simple, fast, and fun:

1. Import an Excel file that contains the information you want to publish.
2. Build the report.
3. Compile and publish the report.



Step 1: Import the Excel File

The first step in creating a model is to import the Excel file that contains the data to support your model. During this step, Xcelsius makes a copy of the Excel file and imports the spreadsheet, including formulas, values, and cell formatting. Once the Excel file is imported, a copy of it is embedded into Xcelsius.

You can continue using the original Excel file, but if you delete or add rows, columns or data, you need to re-import the Excel file.

Step 2: Build the Report

After the Excel file is imported, you can use Xcelsius to build the model or report. Xcelsius contains a host of components—from backgrounds to charts—that you can select and link to one or more cells in the embedded spreadsheet. If you're creating a chart, for example, you can select the chart component, click it, and select the range of chart data from the spreadsheet. This process is similar to the way a chart is created using Excel.

As its name implies, Xcelsius outdoes Excel by allowing you to create dynamic reports as easily as pointing and clicking your mouse. You can even combine two or more components and link them to the spreadsheet. For example, you can define point-and-click radio buttons that combine with a chart to show different information on the chart when each radio button is clicked.

Step 3: Preview and Export

The final step is to preview and export the model. Previewing lets you test your model and see how it will look and behave when it is exported. When you export the model, you generate a Flash animation that is ready to be published. You can preview and edit your model as many times as you need to test and improve it before publishing.

Xcelsius offers a variety of ways to publish your model. For more details on how to publish your model see “Chapter 6: Publishing Models” on page 231.

Understanding Xcelsius’ Tools

Before you begin using Xcelsius, take a moment to familiarize yourself with the interface by reading the following sections.

Using the Components Dialog

The Components Dialog window contains the available components. The components are organized into groups, according to their functionality. You can display all components on the Components Dialog, or you can select a specific category to see only those components that apply to your selection.

If, for example, you need to use a chart, you can select the category “Charts” so that only the available chart types are visible to simplify your selection.

Xcelsius provides the following categories of components:

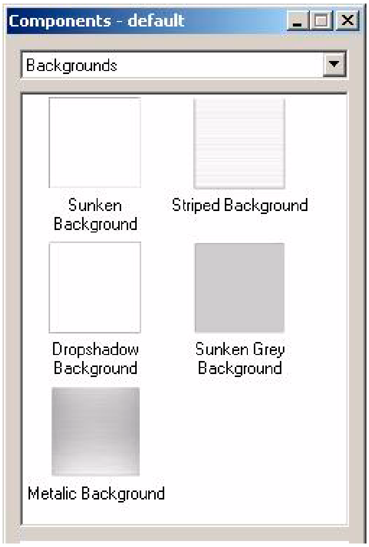
- Backgrounds
- Charts
- Selectors
- Single Value
- Collaboration
- Other
- Maps

Some of these are frequently used in the market while others are unique to Xcelsius.

Note. The Collaboration category is only available in the Professional Edition of Xcelsius.

Backgrounds

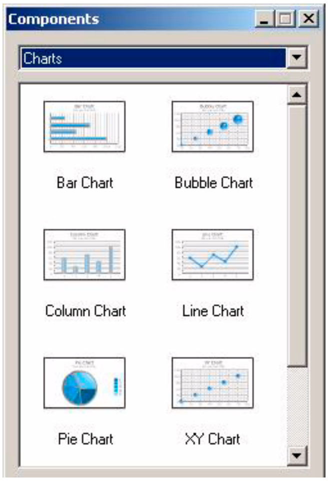
This section contains a set of backgrounds that you can use to enhance your models. See "Using Backgrounds Components" on page 130 for more information.



- **Striped Background**
  An elegant background can be used alone or with any embedded JPG or SWF file.
- **Sunken Background**
  An elegant and transparent background can be used alone or with any JPG or SWF file. The Sunken Background is ideal for developing clean and professional models, without the complexity of working with too many colors.
- **Metallic Background**
  The Metallic Background provides a high-tech look for your models. Elegant and sophisticated, the Metallic Background can be used alone or combined with any embedded JPG or SWF file.
- **Sunken Grey Background**
  The Sunken Grey Background provides the user with a neutral grey tone and soft edges, which can be used perfectly in combination with the metal background. The look and feel achieved through this background component provides a solid ground for light and dark colors.
- **Dropshadow Background**
  The Dropshadow Background provides the same look and feel as the default chart backgrounds, allowing the user to continue the same aesthetic or even create something entirely new. This background is perfect on a blank canvas, providing a visual footing for any information being displayed.

Charts

This section contains a collection of charts that can be used on any model. Select the chart that best suits your model needs. See “Using the Chart Components” on page 77 for more information.

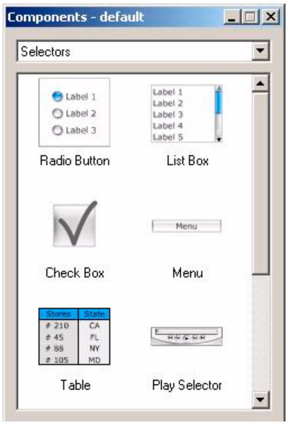


- **Grid**
  A dynamic table that represents a group of rows and columns to dynamically display its content. The Grid lets you show the data just as it is on any table, or permits data modification that can impact other components.
- **XY Chart**
  A powerful chart that displays data requiring two magnitudes to complete the analysis. The XY chart shows each data point as a result of the intersection of X values and Y values. You can, for example, use the XY chart in models that compare ROI (X axis) against Market Value (Y axis) for a group of companies.
- **Pie Chart**
  A chart that represents the distribution or participation of each slice (item) over a certain total that is represented on the overall pie value. The Pie Chart is appropriate for models, such as Revenue Contribution by Product. The overall pie size represents the total revenues. Each slice represents a different product.

- **Line Chart**
  A single- or multi-line chart ideal for showing tendency over a period of time. Use this chart in models that emphasize a trend line, such as Stock Prices and Revenue History.
- **Column Chart** and **Bar Chart**
  A single- or multi-bar chart ideal for showing and comparing one or more items over a period of time or in a specific range of values. You might, for example, use a Column Chart in models that contain the quarterly headcount by region.
- **Combination Chart**
  A combination Column and Line chart ideal for displaying a range of values and a trend line for those values.
- **Stacked Column Chart** and **Stacked Bar Chart**
  A powerful chart that allows you compare several variables over a period of time. Stacked bars allow you to compare one or more variables by adding one variable on top of another. These type of charts are ideal when comparing several variables over a period of time i.e,: Marketing Cost, General Cost, Administrative Cost. Each one of the cost components is presented in a different color and each portion represents a different variable. The total bar size represents the Total Cost.
- **Bubble Chart**
  Despite its apparent complexity, the bubble chart is one of the most powerful analytic tools available. It lets you compare a group of items or series based on three different parameters. It has an X axis and Y axis to represent the item location over the chart area, and a Z value to represent the item size. You could, for example, use this chart to represent the market composition with the X axis representing the ROI by industry type, the Y axis representing the Cash Flow, and the Z axis representing the Market Value.

Selectors

Selectors are probably the most powerful components of all. Their overall functionality lets you create a model with multiple selections. When you combine a selector with any other component such as charts, the result is a powerful dynamic model that is elegant and easy to create. See "Using the Selector Components" on page 90 for more information.



- **Table**
  The Table component is a "What you see is what you get" representation of any group of cells from your Excel file. Each row allows multiple selections. For example, you can use the table to display a Balance Sheet for two years. When you click on each row, the table could display an additional chart that shows the historic balance for each account.

- **Play Selector**
  The play selector sequentially inserts one row or column from a defined range. You can then use that row to create a chart that changes each time the play selector inserts a row or column. You might use the play selector, for example, in models that show sales by a large number of sales representatives. Instead of having to click several times to display a chart for each sales representative, you can create a model that automatically runs the charts with a single click.

- **Radio Button**, **Menu, Combo Box**, and **List Box**
  These options are some of the industry favorites. They permit one selection at a time from a group of selectable items. They are easy to understand and use.

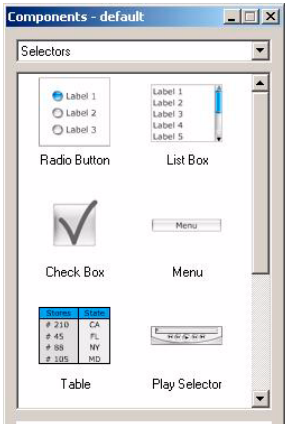
- **Push Button** and **Check Box**
  A mobile set of selectors that have two positions: ON & OFF. With each position, the content displayed can vary, depending on your needs.
- **Filter**
  The Filter component takes a range of data that shares a common number of items and "filters" the content so that there are no duplicated records.

Single Value

This group of components permit user interactivity with other components, such as a chart. These components can be classified in two groups:

- Output components
- Input components.

See "Using Single Value Components" on page 68 for more information.

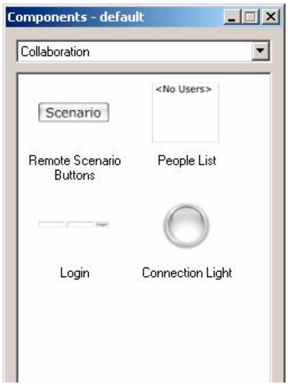


- **Progress Bars** (Output Component)
  Represent a value that changes and fills the progress bar area depending on its value.
- **Sliders** (Input Component)
  Represent a variable that can be modified to affect other components. For example, use a slider to represent the Price per Unit.

- **Play Button** (Input Component)
  Use the play button to increase the value of a cell in your model. For example, link the Play Button to a cell that contains the headcount. What will happen if the headcount increases by one, two, three, or more? The play button takes the initial headcount value and increases its value systematically.
- **Gauge** (Output Component)
  The Gauge measures the result of changes in the Excel cell to which it is linked. If you link the Gauge to a cell that contains a formula, the Gauge reflects the modifications each time the value changes.
- **Value**
  The Value component represents a single cell of your Excel file.

Collaboration

This section is available in the **Professional Edition only** and contain components that can be used in conjunction with a Flash Communication Server to facilitate collaboration between multiple users. See *** for information on configuring your models to work with the collaboration components.



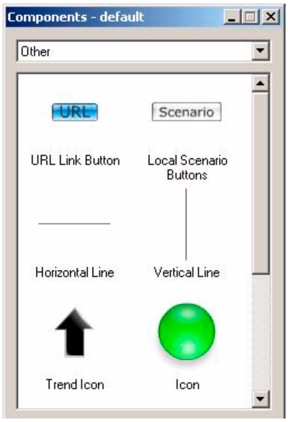
- **Remote Scenario Buttons**
  Lets users save states of an Xcelsius model to a remote server. Afterwards, these states or “scenarios” can quickly be loaded, even after closing the model, making the Scenario Buttons well-suited for saving and reviewing

results of what-if analyses. Since the scenarios are saved to a remote server, the Remote Scenario Buttons provide a simple and powerful way to share results with authorized users across the globe.

- **People List**
  Displays all of the users that are currently connected to collaborative features of the Xcelsius model.
- **Login**
  Allows users to connect to the collaborative features of the model by logging in with a username and/or password.
- **Connection Light**
  Displays the current status of the connection to the collaborative features of the model.

Other

This section contains a set of components that you can use to enhance your models.



- **Trend Icon**
  The trend Icon changes its pointing direction, depending on the value of the cell to which it is linked:
  - If the value is positive, the arrow points up.
  - If the value is zero, the arrow is neutral.
  - If the value is negative, the arrow points down.

- **Icon**
  The Icon is one of the most simple and at the same time most functional components. The Icon can be used as a mobile selector or object. It can represent the value contained in one cell and be compared to its target or budget value.

  The Icon changes color depending on its value. See "Introduction to Dynamic Visibility Functionality" on page 150 for more information.

  At the same time, you can use the Icon to activate and display other components. See "Introduction to Dynamic Visibility Functionality" on page 150 for more information.

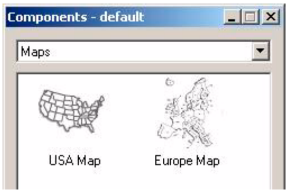
- **Line**
  A simple vertical or horizontal line can enhance your models.
- **Label**
  The label component lets you add an unlimited amount of text to enhance your models. You can use the Label component to create titles, subtitles, explanations, help, and so on.
- **URL Link Button**
  A simple button that links to a relative or absolute URL when pressed.
- **Local Scenario Buttons**
  Lets users save states of an Xcelsius model to their local machines. Afterwards, these states or "scenarios" can quickly be loaded, even after closing the model, making the Scenario Buttons well-suited for saving and reviewing results of what-if analyses.

  Since these scenarios are saved to the local machine, the scenarios will **not** be available if the model is opened on a different machine. The **Remote Scenario Buttons** (available in the **Professional Edition only**) can be used to make scenarios available to multiple users on different machines.

- **Input Text**
  A simple, yet powerful input component which allows users to input values into the model by typing.
- **Input Text Area**
  Similar to the Input Text component, the Input Text Area allows users to input text into the model. The Input Text Area, however, allows users to type multiple lines of text, making it useful for comments or entries where the size of the input is unknown.
- **XML Data Button**
  Available in the **Professional Edition only**, the XML Data buttons allow users to refresh model data from an external source. Live model data can also be translated and sent to an external source using the XML Data Buttons. See "Using the XML Data Component" on page 192 for more information.

Maps

This group of components provides specialized selector functionality in the form of maps. See "Using the Map Component" on page 123 for more information.



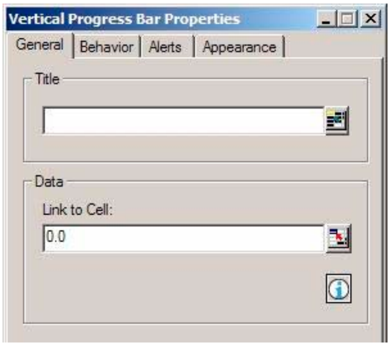
- **USA Map**
  A graphic representation of the USA map can be used as both an output and input component. Each state can represent an output value while at the same time having the same functionality as any other selector.
- **Europe Map**
  A graphic representation of the European map can be used as both an output and input component. Each country can represent an output value while at the same time having the same functionality as any other selector.

Using the Components Property Window

The Component Properties window describes the specific functionality of each component. After you place a component on the canvas area, you can access the Component Properties window by double-clicking the selected component. In general, the Component Properties window has the same structure for all components, but the functionality described is specific to each individual component.

For example, the Bubble Chart Properties Window has additional functions when compared to the Line Chart Properties Window. To navigate the Component Properties window, click on any of the tabs. The functions change accordingly.

The Component Properties window has four tabs:



Link to Cell: 0.0

- **General Tab**
  Describes the basic and minimum required functionality for the selected component. Typically, it contains an area for the title and an area for the Data Source Link or the value(s) that the component represents. See “Step 2: Select the Data Source(s)” on page 43 for more information.
- **Behavior**
  Describes functions related to the way the component will work on the model. Typically, it contains an area for defining the Display Status, entry effects, and functions

related to limits and interactivity. See “Introduction to Dynamic Visibility Functionality” on page 150 for more information.

- **Alerts**
  Contains all the related functionality required when using alerts. Alerts are an excellent way to measure performance and enrich your models with serious business content. On this tab, you can define the number of alert colors, the colors itself, the color method, and the target or budget. See “How to Use Alerts” on page 164 for more information.
- **Appearance**
  Contains a series of functions, and in some cases subtabs, that let you modify the appearance and final look of each component. On this tab, you will find options like font size, title location, colors and similar intuitive and easy-to-use functions. See Chapter 8 of the Xcelsius complete guide, found on your installation CD for more information.

Component Properties for Multiple Selections

By selecting multiple components on the canvas, you can simultaneously edit Component Properties for each component in your selection. Accessing Component Properties for multiple components is accomplished in the same way as single selections: select your components and double click on the selection. You can also access Properties by right clicking on the selection and selecting from the appropriate list.

If the components are of the same type, you will be able to edit Properties specific to that component. For example, if your current selection contains three Line Chart components, you will be able to access the Component Properties specific to the Line Chart. Any change made to the properties will apply to each component in the selection. Component Properties of components of mixed types or groups are limited to the Display Status parameters of the Behavior tab.

Using the Canvas

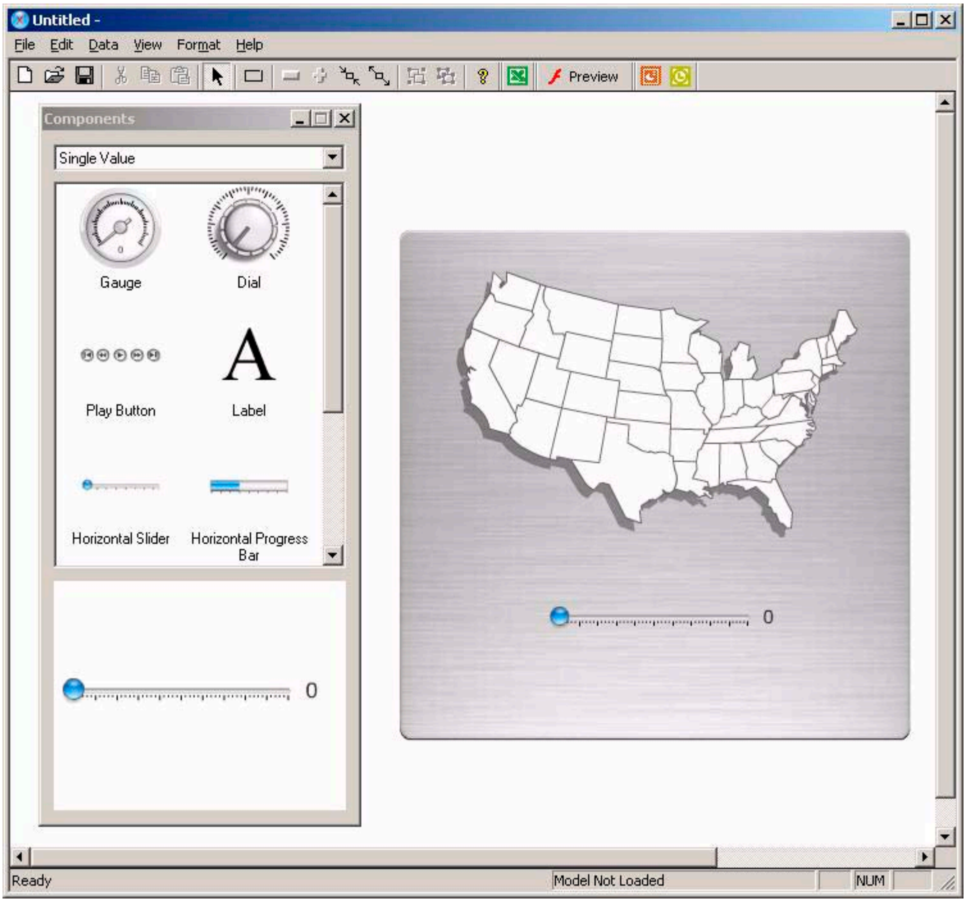
The canvas area refers to the white work area where you place the objects you need to create a model.

Inserting Components in the Canvas

To insert a component in the canvas area:

1. Click a component from the Components Dialog Window (for example, the USA Map).
2. Click the canvas area.
3. Repeat this procedure for each component.

In the following picture, we have inserted a metallic background, the map, and a slider:



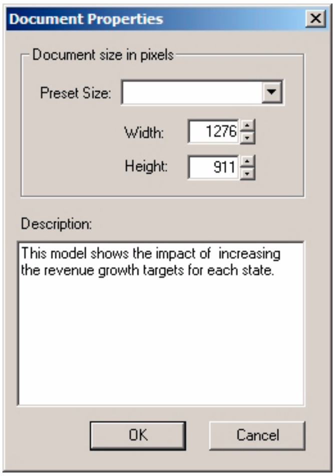
Fitting the Canvas To Components

After you complete your model, you may want to adjust its final size to eliminate any surrounding white area.

To do this, use the Fit to Canvas to Components Icon on the task bar. Your model size will be adjusted to the optimal size according to the components you are using.

Changing the Canvas Size

You can change the canvas size before you start creating a model. To do this, select Properties from the File menu. The Document Properties dialog box appears.



Width: 1276

Height: 911

Description:

This model shows the impact of increasing the revenue growth targets for each state.

You can modify the preset size to some standard sizes, or you can create your own size. The ideal size of your model depends on the quantity of components that you plan to use.

If you are building a simple model such as a Portlet that contains a chart and slider, the size can be around 640x840. Use the full size screen for dashboards or 1-page reports that contain several charts and selectors.

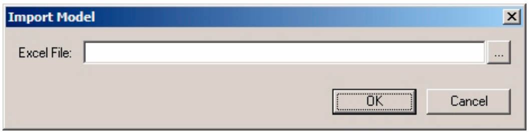
In the description field, you can write a brief description of your model, the author, the date, and its intended functionality. This information will appear to all other designers when they use your XLF file (XLF is the extension to which Xcelsius saves its internal files) or when you save your model as a template.

Using the Import from Excel Icon

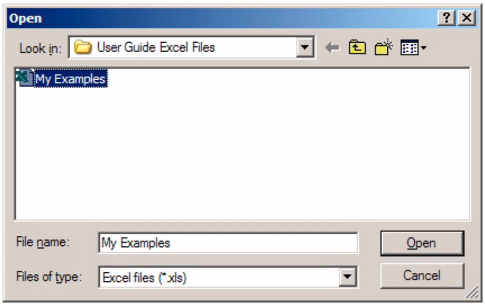
Use the Import from Excel Icon on the task bar to import the Excel file that contains the data to support your model.

If it is the first time that you are importing an Excel file for this model, the wizard asks you to browse, select the file, and click Open. If you already have an Excel file into the application, you have the option to either re-import the Excel file or select a new one.

1. Click the Excel Icon.



2. Browse and select your Excel file.



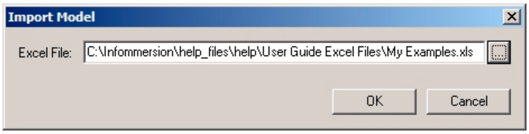
Look in: User Guide Excel Files

My Examples

File name: My Examples

Files of type: Excel files (*.xls)

3. Click **Open** to select the Excel file.



Excel File: C:\Infommersion\help_files\help\User Guide Excel Files\My Examples.xls

4. Click **OK** to import the Excel file.

Importing an Excel file creates a mirror copy of your Excel file in the Xcelsius application. This mirror copy is totally independent of your original file; therefore, if you make changes to your Excel file that affect the Xcelsius model, you will have to re-import the Excel file. See “Updating Data for a Model” on page 46 for more instructions.

Previewing the Model

With Xcelsius, you can preview your final model as many times as you need. This option is extremely helpful since it lets you validate and test your model and results. At the same time, it lets you experiment with various combinations of components, colors, and layouts to make sure your model looks great when it is published.

Use the toolbar button that appears towards the far right of the toolbar to toggle between edit and preview modes:

- Clicking the Preview button enables preview mode, where you can interact with the model as you would when it is published.
- Click the Preview button again to return to Edit mode.

Dynamic and Static Data Sources

The difference between Dynamic and Static Data Sources is an important concept to understand when creating models. There are two levels of interactions that components have relative to the spreadsheet:

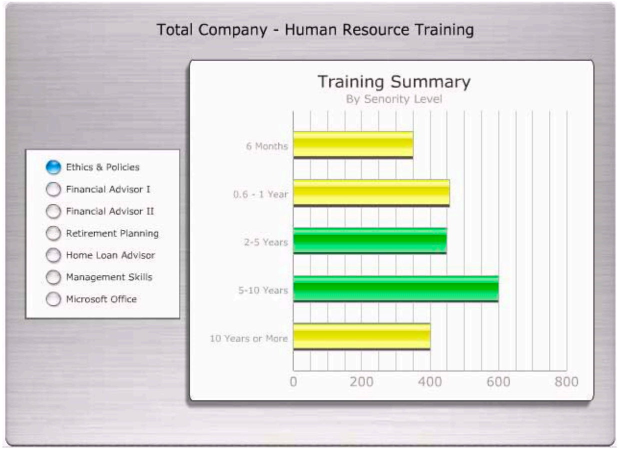
- Dynamic
- Static

Dynamic Data Sources

This icon means that the content of the cell(s) can vary during a simulation process and that Xcelsius will update its content respectively.

Example

You want to create a report containing a radio button and a chart, to show the progress of several Human Resources Training Program courses. You need to use the same chart for each course, so that your model is simple and dynamic. It will look like this:



Using Dynamic Data Sources lets the chart data change with each selection you make on the radio button. The radio button inserts a row that contains the data for each course on a range that is linked to the chart. Since the chart contains the Dynamic Link on the Data Source, the chart content changes with each selection you make on the radio button. This is described in more detail in “Using the Chart Components” on page 77.

Static Data Sources

This icon means that the content of the cell(s) won't vary during the simulation; therefore, Xcelsius won't update its content.

Example Continuing the previous example, the chart title, “Total Company - Human Resource Training,” is tied to a static cell. In this case, the title won't change with each selection you make on the radio button.

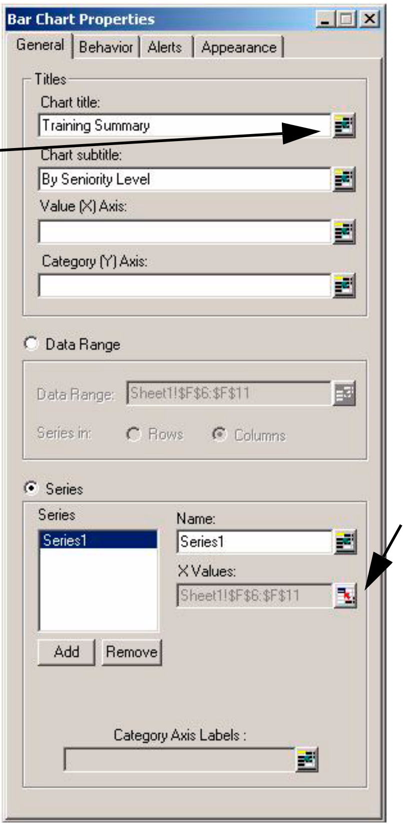


Chart title: Training Summary
Chart subtitle: By Seniority Level
Value (X) Axis:
Category (Y) Axis:

○ Data Range
Data Range: Sheet1!$F$6:$F$11
Series in: ○ Rows ● Columns

● Series
Series: Series1
Name: Series1
X Values: Sheet1!$F$6:$F$11
Category Axis Labels :

Static Data Source - it won't change during the simulation

Dynamic Data Source - it WILL change during the simulation.

Using Templates

Xcelsius offers a set of state-of-the-art templates that you can use to create a new model. Templates are an excellent and efficient way to create a model since its design and look have been proven. You can use the existing Xcelsius templates, or you can create a model from scratch and save it as a template. As you may have experienced with similar applications, Power Point for example, sometimes the most difficult part of creating a presentation is to find the best combination of font sizes, colors, elements, and general layout. This difficulty is easily overcome when you have a library of templates with a broad spectrum of possibilities so that you can choose the one that better fits your needs.

For more information on creating and using templates, see “Creating Templates” on page 217.

Global Styles

Global Styles are a set of appearance parameters that allow you to change the default visuals of new components. You can also apply Global Styles to existing models to change their overall appearance. Style parameters are broken up into four major categories:

- Backgrounds & Others
- Charts
- Single Values
- Maps & Selectors.

Components that fall under the same category will share the same style defaults. These category defaults, when taken together, creates the “global” style. These parameters consist of color, font style, and custom art defaults.

Note. Global Styles are not transferred with Xcelsius authoring files (XLFs). Opening an XLF does not load the Global Style used in the XLF into the machine it is opened on. If the Global Style used by an XLF is unavailable, the style will continue to be used by the existing components in the model, but it will not be able to be applied to new components. Please refer to the Transferring Global Styles section of the Users Guide for information on how to copy Global Styles from one computer to another.

For more information about creating and using global styles, see “Using Global Styles” on page 220.

3

Chapter 3:
Creating and Updating Models

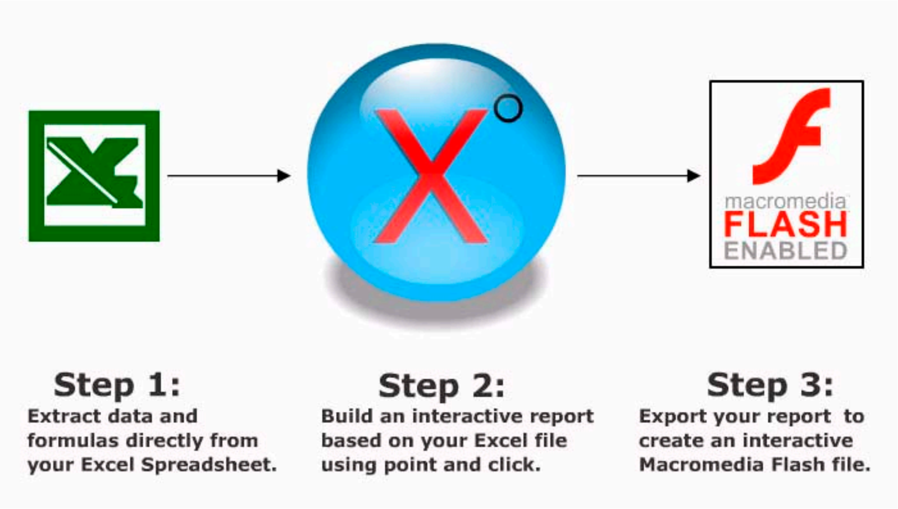
This chapter contains the following sections:

Creating a Model . . . . page 40
Updating Data for a Model . . . . page 46

Creating a Model

To create an Xcelsius model, follow these simple steps:

1. Import the Microsoft Excel file that contains the data to be used in the model.
2. Link the Xcelsius components to the spreadsheet.
3. Preview the model and publish it.


macromedia
FLASH
ENABLED
Step 1:
Extract data and formulas directly from your Excel Spreadsheet.
Step 2:
Build an interactive report based on your Excel file using point and click.
Step 3:
Export your report to create an interactive Macromedia Flash file.

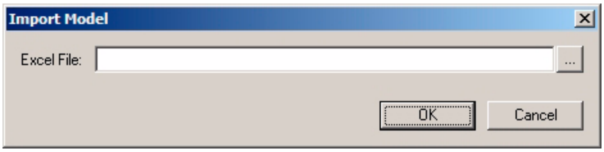
The following pages describe this process in more detail.

Step 1: Import the Excel File

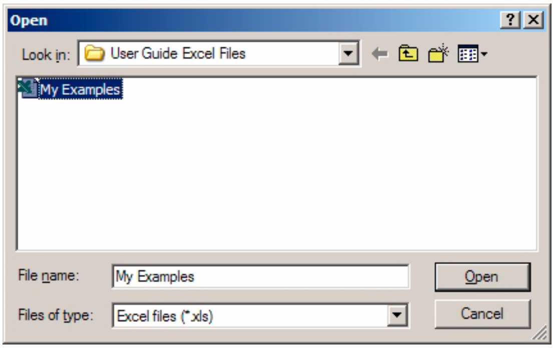
The first step for creating an Xcelsius model is to import an existing Microsoft Excel file that contains the data you want to use in your model. There are two ways to import the Excel file:

- Using the Excel File Icon on the task bar
- Using the Import Model option on the Data menu

Either method displays the Import Model window:



1. Click the box with the three dots to display the Open dialog box.



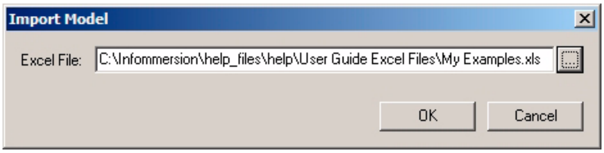
Look in: User Guide Excel Files

My Examples

File name: My Examples

Files of type: Excel files (*.xls)

2. When you find the Excel file you want to use, click Open.



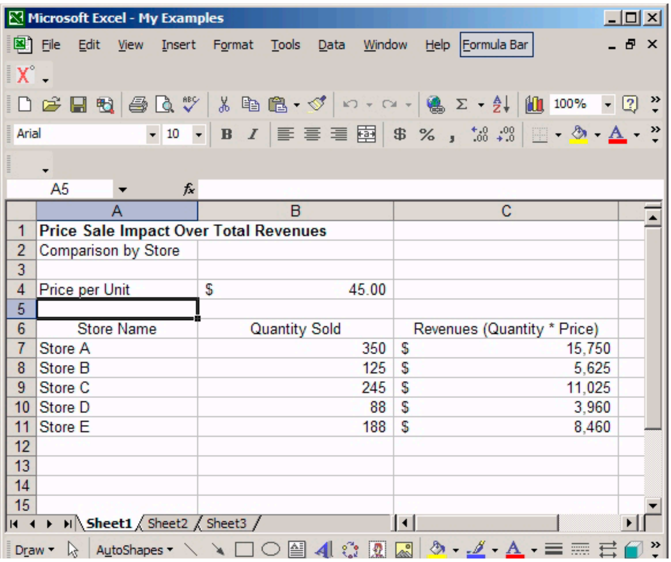
Excel File: C:\Infommersion\help_files\help\User Guide Excel Files\My Examples.xls

The file that you selected now appears on the Import Model dialog. Click OK to import the Excel file into Xcelsius.

Note. The Excel file is imported into the Xcelsius application as a copy of your original file. You can continue making changes or modifications in your original file and then re-import the Excel file. See “Updating Data for a Model” on page 46 for detailed steps.

3. After importing the Excel file, select the Data Source (s). See “Step 2: Select the Data Source(s)” on page 43 for more detailed steps.

Example The following figure displays an Excel file that has been imported into Xcelsius. For this example, you measure the total revenues by store for an 'X' product. The Excel file contains the price per unit, the quantities sold by store, and a simple formula to calculate the revenues by store (Quantity * Price).



	A	B	C
1	**Price Sale Impact Over Total Revenues**		
2	Comparison by Store		
3			
4	Price per Unit	$ 45.00	
5			
6	Store Name	Quantity Sold	Revenues (Quantity * Price)
7	Store A	350	$ 15,750
8	Store B	125	$ 5,625
9	Store C	245	$ 11,025
10	Store D	88	$ 3,960
11	Store E	188	$ 8,460
12			
13			
14			
15			

In this example, we want to create a dynamic model that lets you change the Price Per Unit and see how this change affects each store.

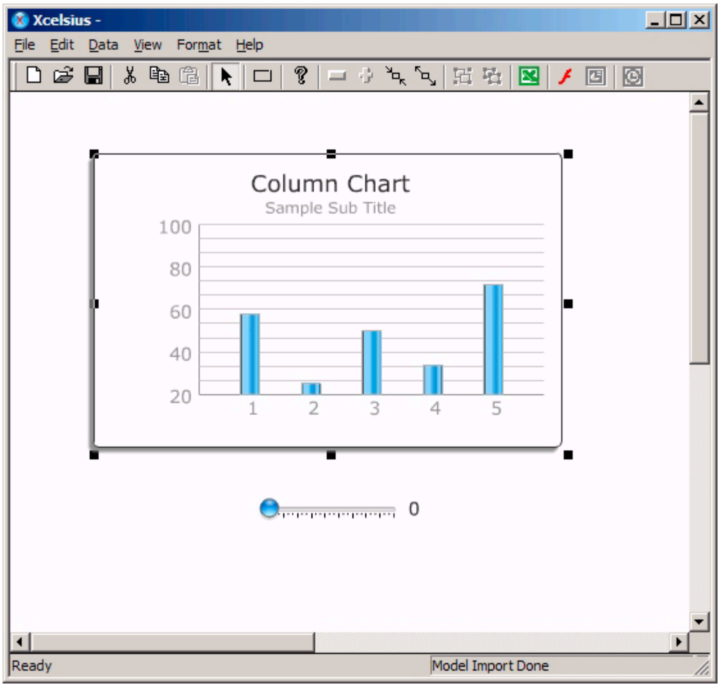
Step 2: Select the Data Source(s)

The second step to creating an Xcelsius model is to select the data source(s) linked to the components. With this step, you assign one or more cells from your imported Excel file to one or more Xcelsius components.

Continuing with our example, our user needs to show Revenues by Store using a Column Chart, and the Price per Unit using a Horizontal Slider.

To accomplish this:

1. Insert the components into the canvas area.



2. Next, link the Column Chart to the spreadsheet. Double-click the Column Chart to open the Property Window. See “Using the Components Property Window” on page 28 for more information.

3. Then, click on the Data Source icon and select the range that contains the data for the chart. This is the same procedure you perform when creating a chart in Excel.

4. Add or link the chart title and subtitle, add or link the axis names and category labels, and so on.

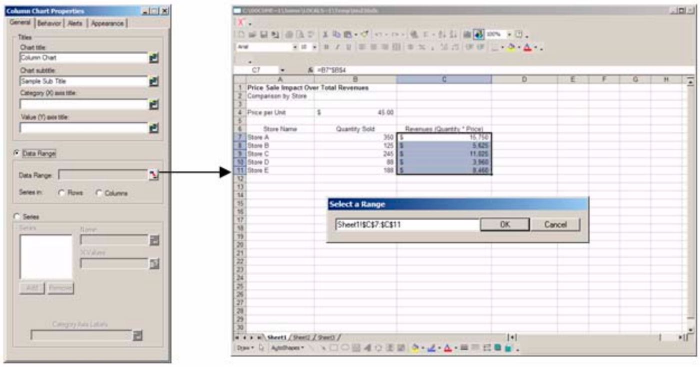


Chart title: Column Chart

Chart subtitle: Sample Sub Title

Category (X) axis title:

Value (Y) axis title:

Data Range:

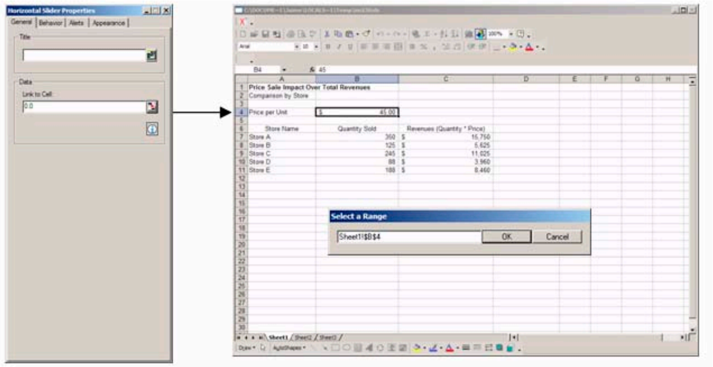
Series in: ○ Rows ○ Columns

C7 =B7*$B$4

	A	B		C
1	Price Sale Impact Over Total Revenues			
2	Comparison by Store			
3				
4	Price per Unit	$	45.00	
5				
6	Store Name	Quantity Sold		Revenues (Quantity * Price)
7	Store A	350	$	15,750
8	Store B	125	$	5,625
9	Store C	245	$	11,025
10	Store D	88	$	3,960
11	Store E	188	$	8,460

Sheet1!$C$7:$C$11

5. Next, link the Horizontal Slider to the cell that contains the Price Per Unit. Click the slider and link it to the Price per Unit Cell.



Link to Cell: 0.0

B4 45

	A	B		C
1	Price Sale Impact Over Total Revenues			
2	Comparison by Store			
3				
4	Price per Unit	$	45.00	
5				
6	Store Name	Quantity Sold		Revenues (Quantity * Price)
7	Store A	350	$	15,750
8	Store B	125	$	5,625
9	Store C	245	$	11,025
10	Store D	88	$	3,960
11	Store E	188	$	8,460

Sheet1!$B$4

Proceed to the final step: Previewing and Publishing, below.

Step 3: Previewing and Publishing

The third and final step is to preview and publish the model. During this step, you can see a preview of the live model, test the simulation result, make the required adjustments, and finally, generate the SWF or Flash animation that contains the model. At that point, the model is ready for publishing and distribution.

You can use the toolbar button that appears towards the far right of the toolbar to toggle between edit and preview modes:

Clicking the Preview button enables preview mode, where you can interact with the model as you would when it is published.

Click the Preview button again to return to Edit mode.

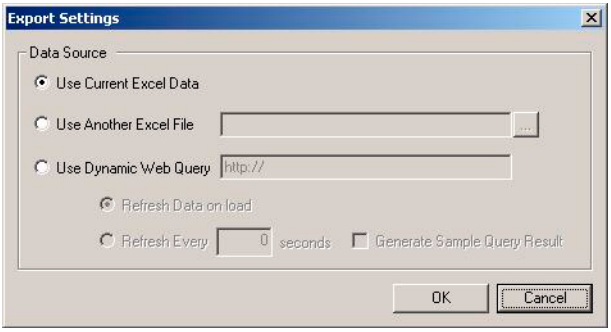
Once you are satisfied with the results of the preview, the model is ready to be published. You can publish your model using one of the following methods:

- Export as Macromedia Flash (SWF)
- Export as HTML
- Export to PowerPoint
- Email Content Using Outlook
- Export to Plumtree Portal

See “Chapter 6: Publishing Models” on page 231 for more information.

Updating Data for a Model

Updating data for a model may be one of the most important tasks in any ongoing report initiative. You can easily re-import the Excel file and replace the entire model, or you can create more customized and sustainable data replace methods. This section provides an overview of the available options for updating data for a model. The export settings menu option offers different ways to substitute the data in your model:



Data Source

● Use Current Excel Data

○ Use Another Excel File

○ Use Dynamic Web Query http://

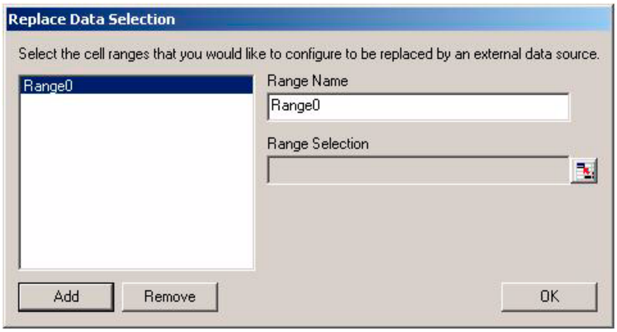
● Refresh Data on load

○ Refresh Every 0 seconds ☐ Generate Sample Query Result

- **Use Current Excel Data** takes the data as it exists in the currently imported model. This is the default option.
- **Use Another Excel File** lets you specify a different Excel file from which to take data at export time.
- **Use Dynamic Web Query** allows the exported model to get data dynamically from an external XML data source. This functionality is only available in the Xcelsius Professional Edition (see “Using Web Services” on page 184 for more information)

To use either of the first two replace data features above, you must use the Replace Data Selection dialog available from the Data menu (as shown below). This menu lets you select which range(s) from the spreadsheet are data that should be replaced. Only cells containing data will be replaceable. This will allow you to customize which subset of the data in your model will need to be updated in an ongoing basis. When you specify the “Use Another Excel File” option, and you have selected which ranges will be replaced, the file you select only has to contain the data that you have selected as replaceable.

This allows you to create a logical separation between your model, and the data that the model needs in order to be kept up to date.



Replace Data Selection
Select the cell ranges that you would like to configure to be replaced by an external data source.
Range0
Range Name
Range0
Range Selection
Add
Remove
OK

Re-Importing the Excel File

In most situations, when you are creating a model you will need to re-import the Excel file into Xcelsius. This is normally because you decided to add or modify the data in the spreadsheet. Since Xcelsius makes a copy of the original Excel file and imports the copy, when you make changes to the original Excel file, you will have to re-import it.

When re-importing the Excel file, be aware that if you inserted rows, columns or data, you may risk the links that you previously created. Xcelsius will keep the link as a static reference. For example, if originally you linked a chart to the range A2:H2, and after that you modified the Excel file to the point that now the chart range is A3:H3, you will need to manually adjust the link after re-importing the Excel file. Xcelsius will continue using the range A2:H2 until you manually change the link.

Two situations may occur when re-importing the Excel file:

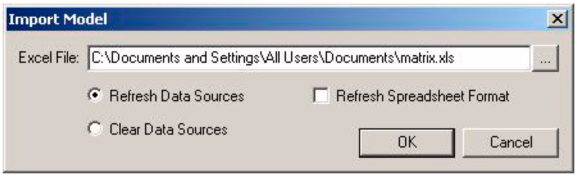
- The Excel file is significantly different and you want to delete ALL the links and link the components again.
- The Excel file is the same or with small changes and you want to keep ALL previous links.

To re-import the Excel file:

1. Click on the Excel icon available on the task bar.

   Or select the Data > Import Model option available on the main menu.

   If you already have an Excel file in your model, you will get the following window:



Excel File: C:\Documents and Settings\All Users\Documents\matrix.xls

● Refresh Data Sources

○ Clear Data Sources

☐ Refresh Spreadsheet Format

Select the Excel file to be imported and then chose from one of the following options.

- **Clear Data Sources:**
  This action will import the selected spreadsheet and ALL previously established links will be lost. Use this option when the Excel file is significantly different and you need to delete ALL the links and start the model again.
- **Refresh Data Sources:**
  This action will import the selected spreadsheet. Use this option when the Excel file is the same or with small changes and you need to keep ALL previous links. ALL previously established links to the spreadsheet will be saved. However, if since the last import you have inserted, deleted or modified rows, column or data, it is possible that the links will be affected. Please review them before saving the model.

Refresh Spreadsheet Format

When selecting to “Refresh Data Sources” you have the additional option to refresh the spreadsheet format. Use this option when some spreadsheet formatting parameters have changed which you want updated. This can include:

- numeric format (e.g. percent, currency, data and time formats) which can apply to most components
- cell width, height, color, border etc. (which only apply to the table and the label components).

Sometimes it is convenient to *NOT* refresh the spreadsheet format, such as when you have already spent some time customizing formatting parameters for a component and don't want that information to be lost on re-import.

Re-Importing with Renamed Sheets

Re-importing a spreadsheet that has a sheet that has been renamed will cause all links and formulas to be lost. A warning message will recommend two things:

1. Use the same sheet name

2. Re-import using the Clear Data Sources option.

Using the Data Replace Option

With the Data Replace option you can define the cell or cells that are going to be updated each time that you generate a SWF file.

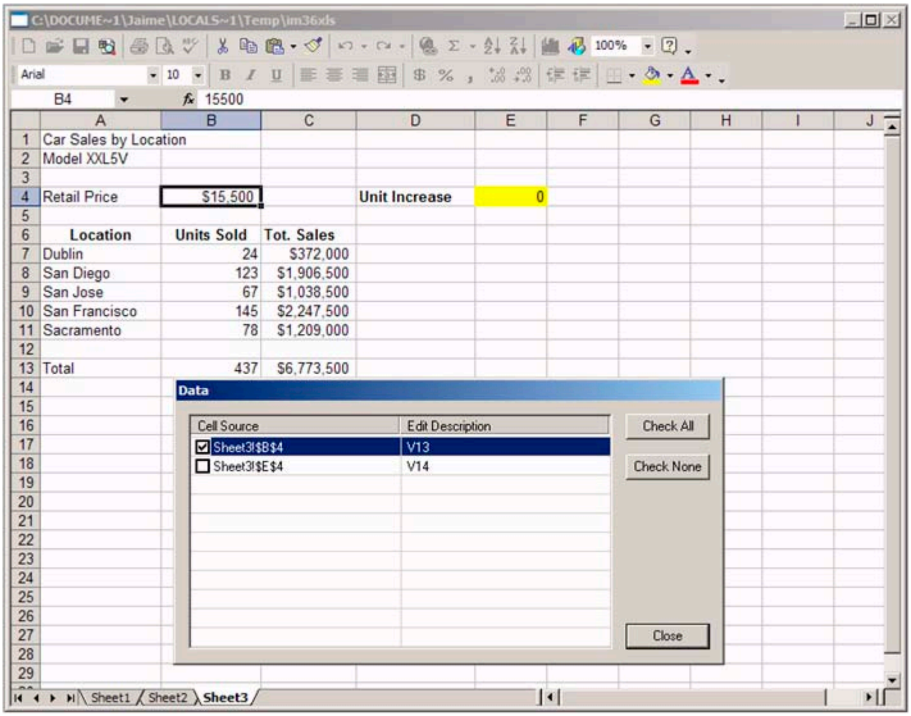
For example, suppose you have created a monthly sales report. Today you have information for six or seven months, the next month you will get a new month of data, and so on. For this scenario, you may want to create your model and use the Data Replace options so that each time that you generate a new SWF file it takes the data included in the cell that represents the new month.

Example Another simple example is for a model that uses the retail price to calculate the expected revenues. In this case, you want Xcelsius to update a single cell while maintaining the original imported values in all other cells. To do this:

1. With your model on the canvas, on the Data menu, click on Data Replace.

   This function lets you select the cell(s) that you want Xcelsius to modify each time the Excel file is re-imported. All other cells will remain the same.

   In this case, we need to update the Retail price cell.



B4 15500

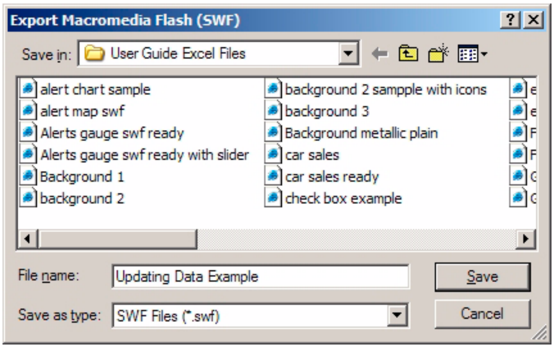
	A	B	C	D	E
1	Car Sales by Location				
2	Model XXL5V				
3					
4	Retail Price	$15,500		Unit Increase	0
5					
6	Location	Units Sold	Tot. Sales		
7	Dublin	24	$372,000		
8	San Diego	123	$1,906,500		
9	San Jose	67	$1,038,500		
10	San Francisco	145	$2,247,500		
11	Sacramento	78	$1,209,000		
12					
13	Total	437	$6,773,500		

Cell Source	Edit Description
☑ Sheet3!$B$4	V13
☐ Sheet3!$E$4	V14

2. The next step is to generate the SWF file.

   From the File menu, click on Export, and then click Macromedia Flash. This action will generate the SWF file.

3. Save the SWF file.



Save in: User Guide Excel Files

File name: Updating Data Example

Save as type: SWF Files (*.swf)

4. Choose Replace Data.

Using the Use Another Excel File Option

With the Use Another Excel File option you can generate SWF files that use different data than the Excel file that the model currently uses.

For example, suppose you have created a monthly sales report. Today you have information for six or seven months, the next month you will get a new month of data, and so on. For this scenario, you may want to create your model and use the Use Another Excel File option so that each time that you generate a new SWF file it takes the data included in the cell that represents the new month.

Example

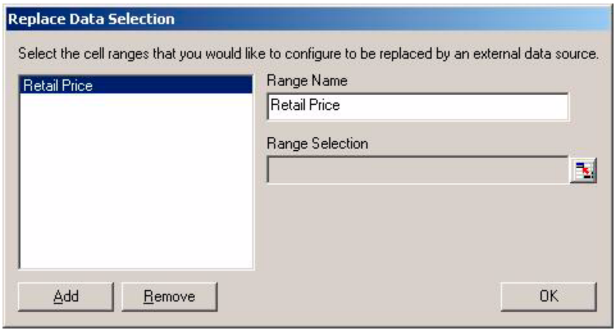
Another simple example is for a model that uses the retail price to calculate the expected revenues. In this case, you want Xcelsius to update a single cell while maintaining the original imported values in all other cells. To do this:

1. With your model on the canvas, on the Data menu, click on Replace Data Selection.

   This function lets you select the cell(s) that you want Xcelsius to modify each time the Excel file is re-imported. All other cells will remain the same.

   In this case, we want to select the Retail Price cell for data replace.

2. Click Add to add a new range that we will call Retail Price.



Replace Data Selection

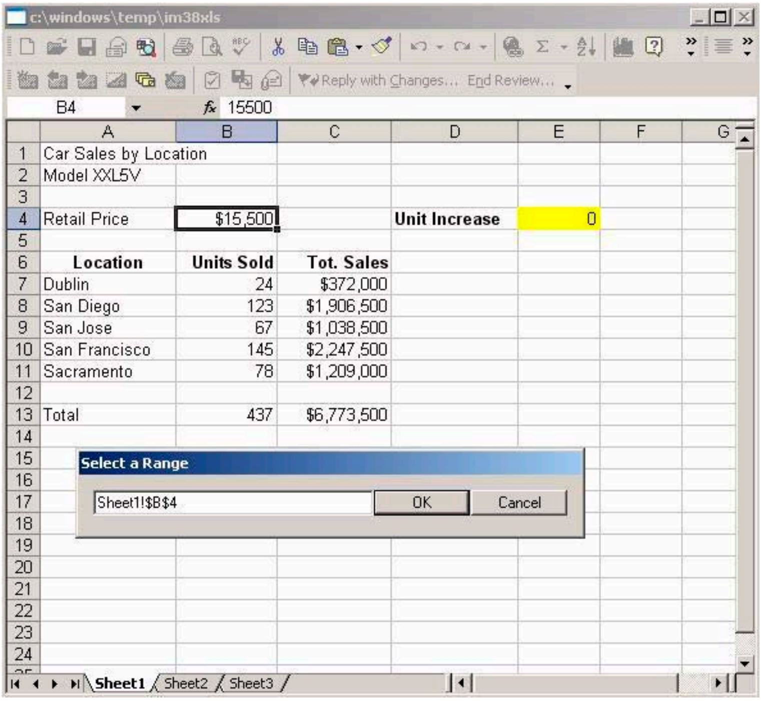
Select the cell ranges that you would like to configure to be replaced by an external data source.

Retail Price

Range Name: Retail Price

Range Selection:

3. Now click on the Range Selection icon to select the Retail Price cell from the Excel file.



c:\windows\temp\im38xls

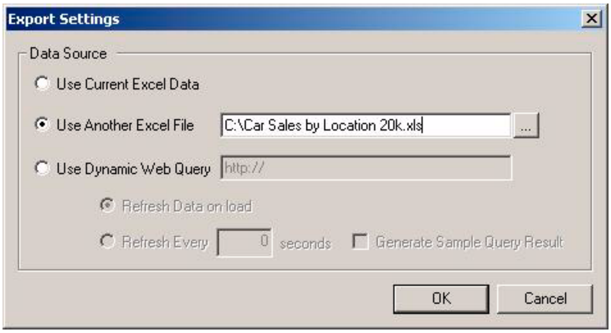
B4 — 15500

	A	B	C	D	E
1	Car Sales by Location				
2	Model XXL5V				
3					
4	Retail Price	$15,500		**Unit Increase**	0
5					
6	**Location**	**Units Sold**	**Tot. Sales**		
7	Dublin	24	$372,000		
8	San Diego	123	$1,906,500		
9	San Jose	67	$1,038,500		
10	San Francisco	145	$2,247,500		
11	Sacramento	78	$1,209,000		
12					
13	Total	437	$6,773,500		

Select a Range

Sheet1!$B$4

4. With your model on the canvas, on the File menu, click on Export Settings.



Export Settings

Data Source

○ Use Current Excel Data

● Use Another Excel File C:\Car Sales by Location 20k.xls

○ Use Dynamic Web Query http://

● Refresh Data on load

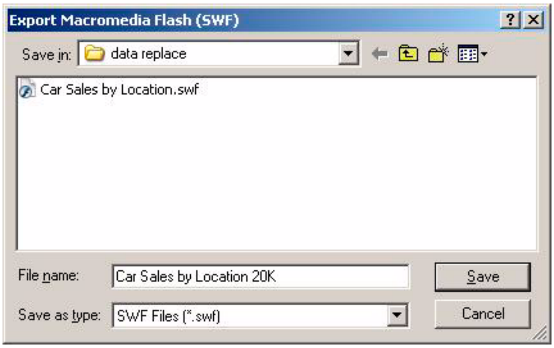
○ Refresh Every 0 seconds ☐ Generate Sample Query Result

5. Select the Use Another Excel File radio button.

6. Select the Excel file to use as the data source for the exported SWF file.

7. From the File menu, click on Export, and then click Macromedia Flash (SWF) to generate the SWF file.

8. Enter a name for the SWF file that will be generated and click Save to generate the SWF file.



Export Macromedia Flash (SWF)

Save in: data replace

Car Sales by Location.swf

File name: Car Sales by Location 20K

Save as type: SWF Files (*.swf)

With these simple steps you have created a sustainable model. The new SWF will take the latest Retail Price available on the Excel file. When the Retail Price changes again, all you have to do is to generate a new SWF file. All other cells not affected by the Retail Price will remain the same.

Using Excel 2003 with XML Maps

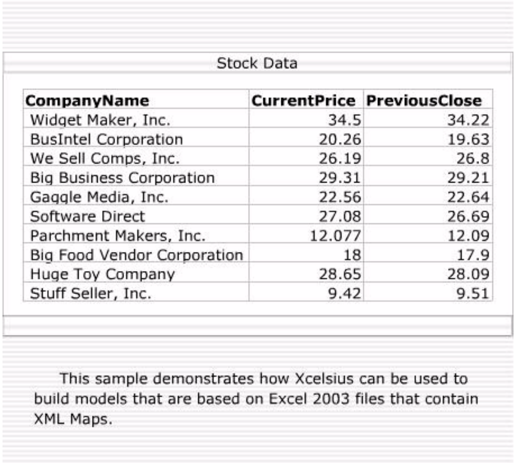
Xcelsius Professional Edition supports the XML functionality that is new to Excel 2003. Excel 2003 introduces the ability to embed XML documents and schemas into a spreadsheet. Xcelsius Professional Edition allows you to import Excel 2003 files that contain XML Maps and generate SWF files that retain the link to the XML source.

Note. This functionality is only available in the Professional Edition of Xcelsius.

Example

Suppose you want to create a model that lists stock market quotes for several companies based on data in an XML file. For this scenario, you can take advantage of the XML Map functionality of Excel 2003 to import the XML data into Excel. After the data has been imported into your Excel file you can use Xcelsius to build a model that retains the link to the XML data source. This means that changes to the XML file will be reflected in the exported SWF file.

The sections listed below walk you through the process of configuring and exporting a SWF file that refreshes its data from a XML data source. All sections use the following model:



Stock Data

CompanyName	CurrentPrice	PreviousClose
Widget Maker, Inc.	34.5	34.22
BusIntel Corporation	20.26	19.63
We Sell Comps, Inc.	26.19	26.8
Big Business Corporation	29.31	29.21
Gaggle Media, Inc.	22.56	22.64
Software Direct	27.08	26.69
Parchment Makers, Inc.	12.077	12.09
Big Food Vendor Corporation	18	17.9
Huge Toy Company	28.65	28.09
Stuff Seller, Inc.	9.42	9.51

This sample demonstrates how Xcelsius can be used to build models that are based on Excel 2003 files that contain XML Maps.

This model displays share price information for several companies. The stock information is contained in an XML file that has been imported into the Excel file and mapped to a range of cells. A Table component has been tied to the range of cells to visualize the data.

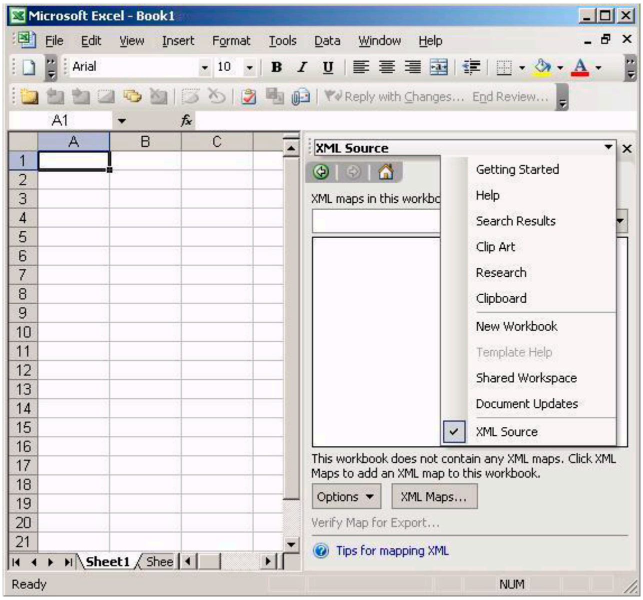
Setting up the Excel File

The first step is to create an Excel 2003 file that contains a XML Map for the source XML file.

Example

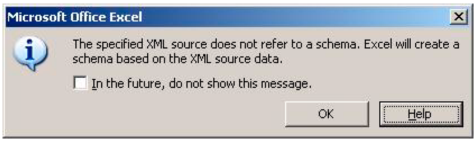
For our stock price example we have a XML file called “xl2003stocks.xml” that we would like inserted into a spreadsheet.

1. To begin, open Excel and start with a blank workbook. Make sure that the Task Pane is visible. The Task Pane is available from the **View** menu. Click on the combo box on top of the Task Pane and select **XML Source**.



This workbook does not contain any XML maps. Click XML Maps to add an XML map to this workbook.

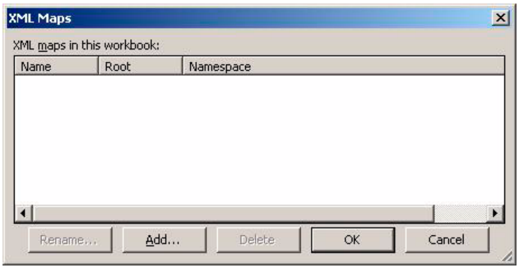
2. Now click on the **XML Maps…** button to display the list of XML Maps for the current Excel file. The following dialog will appear:



The specified XML source does not refer to a schema. Excel will create a schema based on the XML source data.

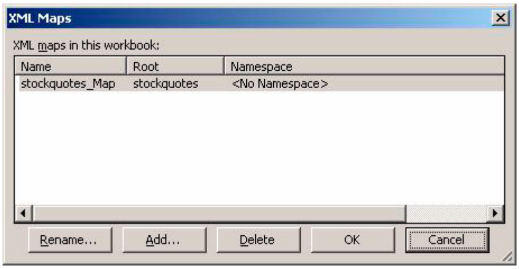
☐ In the future, do not show this message.

3. Next click on the **Add…** button to select the "xl2003stocks.xml" file to map to a range of cells. Browse on the hard disk and select the xml2003stocks.xml file. After you select the file the following dialog may appear:



Name	Root	Namespace

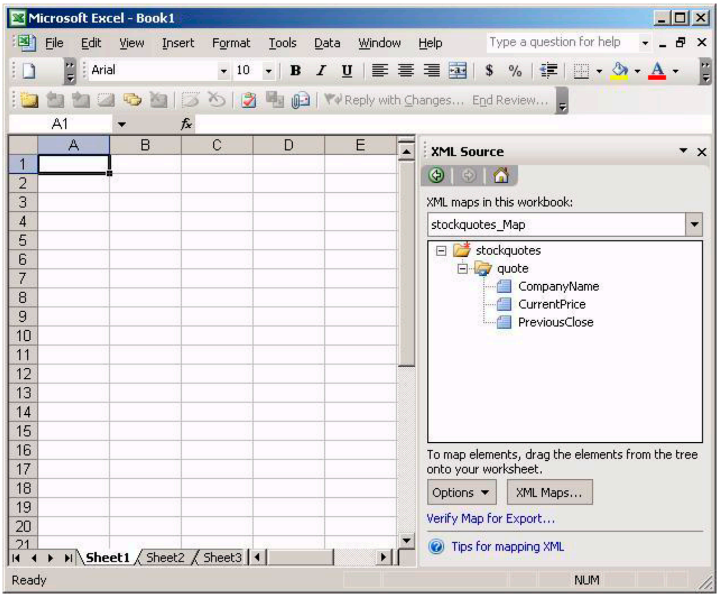
Click **OK** to continue. The XML Maps dialog will now look like the following:



Name	Root	Namespace
stockquotes_Map	stockquotes	<No Namespace>

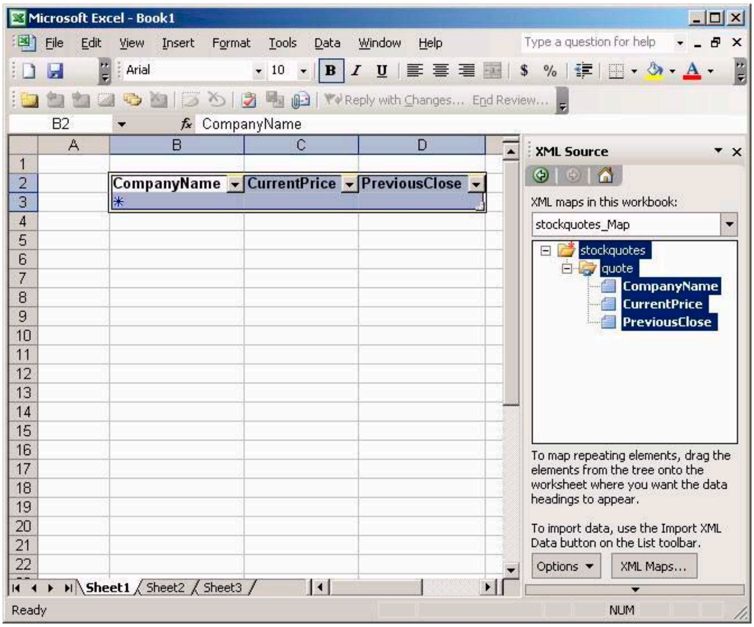
Click OK to continue.

4. At this point you should be back at your Excel document and should see the structure of the XML file in the Task Pane:



To map elements, drag the elements from the tree onto your worksheet.

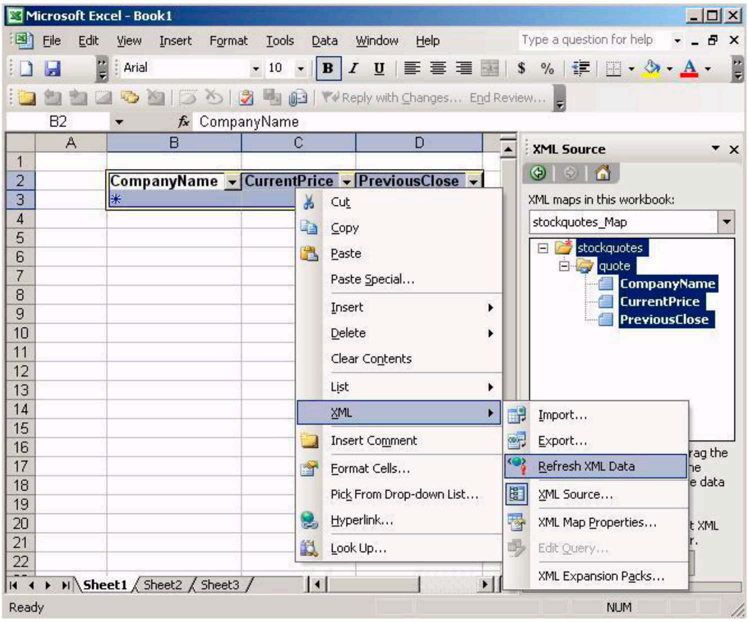
5. Next, drag the “stockquotes” folder from the Task Pane to cell B2:



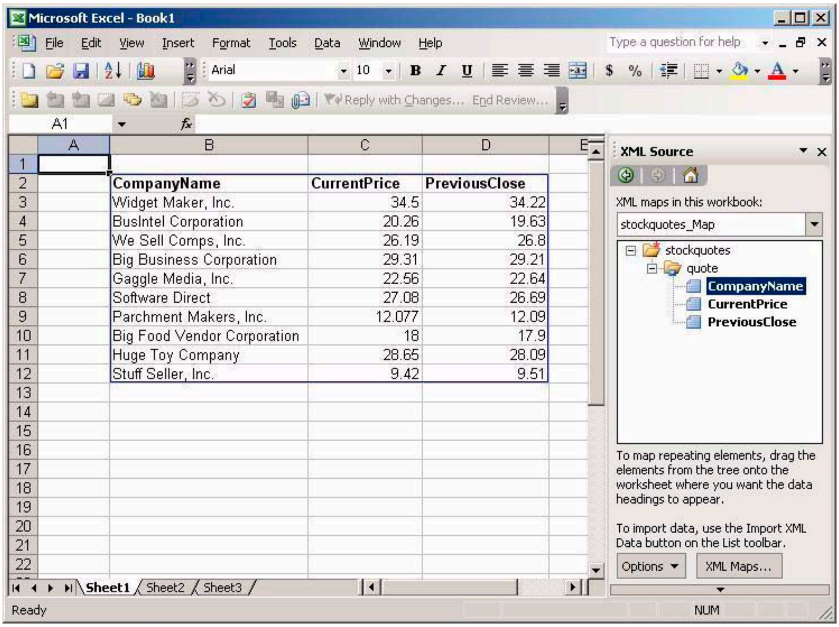
To map repeating elements, drag the elements from the tree onto the worksheet where you want the data headings to appear.

To import data, use the Import XML Data button on the List toolbar.

6. We now have our XML file mapped to a range of cells. The last step is to right click on the inserted range and select the XML|Refresh XML Data menu item.



This will populate the range of cells with the data from the XML file:



CompanyName	CurrentPrice	PreviousClose
Widget Maker, Inc.	34.5	34.22
BusIntel Corporation	20.26	19.63
We Sell Comps, Inc.	26.19	26.8
Big Business Corporation	29.31	29.21
Gaggle Media, Inc.	22.56	22.64
Software Direct	27.08	26.69
Parchment Makers, Inc.	12.077	12.09
Big Food Vendor Corporation	18	17.9
Huge Toy Company	28.65	28.09
Stuff Seller, Inc.	9.42	9.51

To map repeating elements, drag the elements from the tree onto the worksheet where you want the data headings to appear.

To import data, use the Import XML Data button on the List toolbar.

7. Save the Excel file. We are now ready to move on to the next step: Building the Model.

Building the Model

After the Excel 2003 file has been set up, the next step is to build your model and configure the XML Map Options.

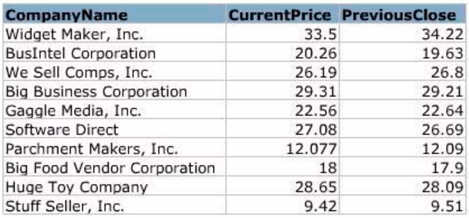
Example, continued

This example will walk you through the process of building the model and configuring the XML Map options.

1. Start Xcelsius and select **File|New** to start with a new blank model. Import the Excel 2003 file that was created in Setting up the Excel File, above. For more information on how to import an Excel file into Xcelsius see “Step 1: Import the Excel File” on page 41.

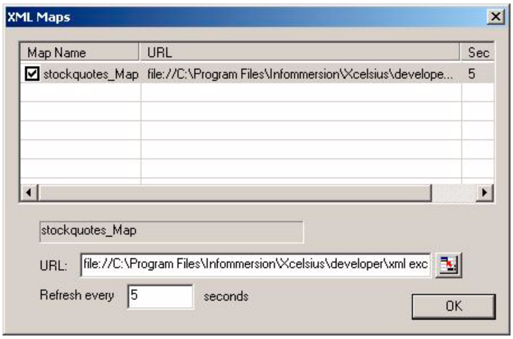
2. After importing the Excel file, select a Table component from the Components dialog and place it on the canvas. Now bring up the property sheet for the Table component

and set the Display Data to the range “Sheet1!$B$2:$D$12”. For more information on how to configure the Table component see “Sample Model: Table” on page 116. After this step you should have a model that looks like the following:



CompanyName	CurrentPrice	PreviousClose
Widget Maker, Inc.	33.5	34.22
BusIntel Corporation	20.26	19.63
We Sell Comps, Inc.	26.19	26.8
Big Business Corporation	29.31	29.21
Gaggle Media, Inc.	22.56	22.64
Software Direct	27.08	26.69
Parchment Makers, Inc.	12.077	12.09
Big Food Vendor Corporation	18	17.9
Huge Toy Company	28.65	28.09
Stuff Seller, Inc.	9.42	9.51

3. The next step is to configure the XML Map Options. To configure the XML Map Options select the **Data->XML Map Options** menu item. The following dialog will appear:



Map Name	URL	Sec
☑ stockquotes_Map	file://C:\Program Files\Infommersion\Xcelsius\develope...	5

stockquotes_Map

URL: file://C:\Program Files\Infommersion\Xcelsius\developer\xml exc

Refresh every 5 seconds

This dialog displays all of the XML Maps that are in the Excel file that was imported. There are three options to configure for the XML Map Options.

- Map Name checkbox
  Check this box to include the selected XML Map in the exported SWF file. Un-checking this box means that the exported SWF file will not pull in data from the XML source that was used to create the XML Map. The range of cells that make up the XML Map

will be exported with the data that was in the Excel cells when the Excel file was imported into Xcelsius.

- URL textbox
  This textbox displays the path to the XML source that was used when the XML Map was created in the Excel file. You can type in a new URL for the source file or you can click on the Dynamic Data Source icon to specify a cell in the Excel file that contains the URL to the XML data source.
- Refresh every n seconds textbox
  The default value for this option is 0. When this option is set to 0 the SWF file will only query the URL when the SWF file is first loaded. A value greater than 0 will query the URL when the SWF file loads and will continue to query the URL every n number of seconds. In the above sample the SWF file that gets generated will pull in the latest XML data from the “xl2003stocks.xml” file on load and continue to pull in the latest data every five seconds.

4. The last step is to export the model. For additional information on how to export the model please see “Chapter 6: Publishing Models” on page 231. Once the model has been exported you can open the exported SWF file in your web browser. If you open the sample SWF file that we just created, and make changes to the “xl2003stocks.xml” file, the changes should be reflected in your SWF file.

How To Create Models That Don't Use Static Data Sources

In some cases you will want to create models that don't use static data sources. This may be because you are dynamically updating data from an external data source or because you want to display results of a formula whose inputs change in response to user interaction with your model. Static data sources are equivalent to taking a snapshot of the data that is contained in those cells, and as such won't update dynamically in response to

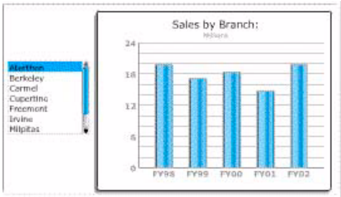
- A formula that gets recomputed based on the value of another cell changing
- Dynamic update of data from an External Data Source.

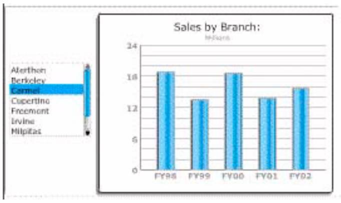
Note. The Use Web Service Option will refresh static data sources, **only** on load. Once the file is loaded, only dynamic data sources will updated (if you set a refresh interval).

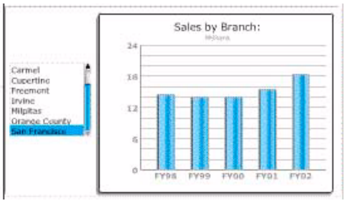
Fortunately, Xcelsius is flexible enough to allow a multitude of ways in which you can create models. In this example, we will show how you can easily convert a sample that uses a static data source to an equivalent model that uses dynamic data sources.

Example

Take a look at the sample model that was used to illustrate how one might use a listbox and a chart:







In Xcelsius, this model is available from the File menu when you select Samples (List Box). In this Model, the listbox uses the rows insert behavior and uses the source data parameter to populate a range that the chart is bound to. In this case, the source data of the selector is a Static Data Source and as such won't be able to be dynamically updated.

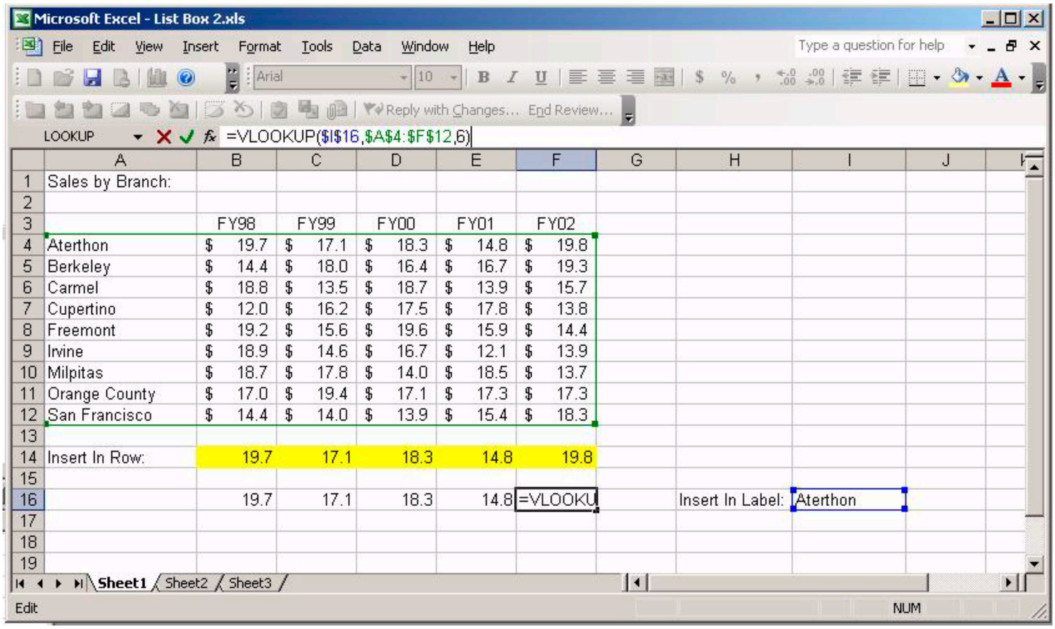
If you need to be able to dynamically update the chart data, it is easy to adapt the model to not use the Static "Source Data" parameter. It basically involves using vlookup formulas in the spreadsheet and the "labels" insert option of the selector as shown in the screenshot below. The following steps were required to adapt this example to not use the static Source Data parameter:

1. Create a vlookup formula for every cell in the Insert In Row. Each formula should reference the range of data

including the labels as well as a cell that will hold the lookup value (I16).

2. Save the Excel file and reimport it into Xcelsius.
3. Change the list box insert option from "rows" to "labels".
4. Select the cell that the vlookup formulas reference (I16) as the listbox's target cell.
5. Change the chart's data range from the previous Insert In Row to the new range that contains the vlookup formulas.
6. Export.

The Model still works as before, since each time you make a selection from the listbox it is inserting the label into I16. This causes each vlookup formula to recalculate using the new index causing the chart to display the data specific to the location selected on the listbox. This is a simple example but can be used to adapt a variety of models that use similar functionality when dynamic data refresh is needed. You can take a look at the sample called "List Box 2". To take a look at the finished version, select File, then Samples, and select “List Box 2”.



LOOKUP =VLOOKUP($I$16,$A$4:$F$12,6)

	A	B	C	D	E	F	G	H	I	J
1	Sales by Branch:									
2										
3		FY98	FY99	FY00	FY01	FY02				
4	Aterthon	$ 19.7	$ 17.1	$ 18.3	$ 14.8	$ 19.8				
5	Berkeley	$ 14.4	$ 18.0	$ 16.4	$ 16.7	$ 19.3				
6	Carmel	$ 18.8	$ 13.5	$ 18.7	$ 13.9	$ 15.7				
7	Cupertino	$ 12.0	$ 16.2	$ 17.5	$ 17.8	$ 13.8				
8	Freemont	$ 19.2	$ 15.6	$ 19.6	$ 15.9	$ 14.4				
9	Irvine	$ 18.9	$ 14.6	$ 16.7	$ 12.1	$ 13.9				
10	Milpitas	$ 18.7	$ 17.8	$ 14.0	$ 18.5	$ 13.7				
11	Orange County	$ 17.0	$ 19.4	$ 17.1	$ 17.3	$ 17.3				
12	San Francisco	$ 14.4	$ 14.0	$ 13.9	$ 15.4	$ 18.3				
13										
14	Insert In Row:	19.7	17.1	18.3	14.8	19.8				
15										
16		19.7	17.1	18.3	14.8	=VLOOKU		Insert In Label:	Aterthon	
17										
18										
19										

4

Chapter 4:
Using Xcelsius Components

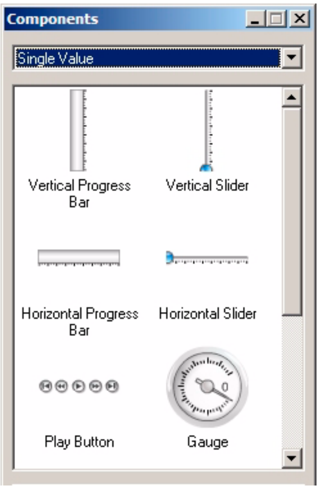
This chapter contains the following sections:

Using Single Value Components. . . . . page 68
Using the Chart Components . . . . .page 77
Using the Selector Components . . . . page 90
Using Backgrounds Components . . . . page 130
Using Other Components . . . . .page 137

Using Single Value Components

This section introduces single value Components, in the Overview, and their most relevant functionality, in Input vs. Output.

single value Components let you add user interactivity to your models. The term single value means that the components are linked to a single cell in the spreadsheet. After that, the component will allow you to modify or will represent the value of that cell.



- **Progress Bars** (Output Component)
  They represent a value that changes and fills the progress bar area depending on its value.
- **Sliders** (Input Component)
  They represent a variable that can be modified to affect other components. Use a slider, for example, to represent the Price per Unit.
- **Play Button** (Input Component)
  Use the play button when you need to increase the value of a cell in your model. You can, for example, link the Play Button to a cell that contains the headcount. What will happen if the headcount increases by one, two, three, or more? The play button will take the initial headcount value and then increase its value systematically.

- **Gauge** (Output Component)
  The Gauge measures the result of changes in the Excel cell to that what it is linked. If you link the Gauge to a cell that contains a formula, each time the value changes the Gauge will reflect the modification.
- **Value**
  The Value component represents a single cell of your Excel file.

Input vs. Output

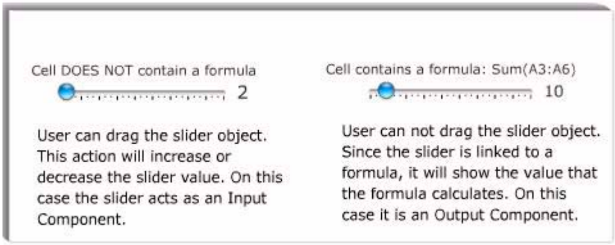
Even though we established a classification of Input and Output Components, you can use any single value component and represent it as an Input or Output. The classification we created is related to normal perception and market standards.

However, what really dictates whether a single value component permits user interaction (Input) or not (Output), is the cell to which it is linked. If the cell contains a formula of any type, the component is interpreted as an Output. If the cell does not contain any formula, then it is represented as an Input.

Example

In the following picture, we have inserted two sliders. The first one is linked to a cell that does not contain a formula. The second slider is linked to a cell that does contain a simple formula.

In the first case, you can modify the slider value (by dragging the slider object), thereby modifying the cell value. In the second case, you cannot modify the slider value.

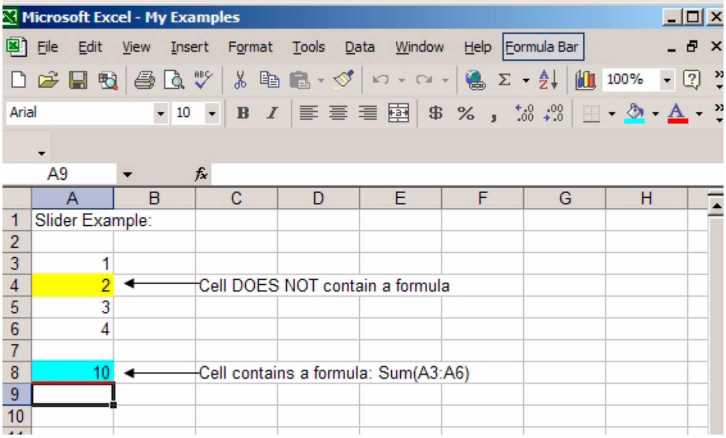

Cell DOES NOT contain a formula
2
Cell contains a formula: Sum(A3:A6)
10

User can drag the slider object. This action will increase or decrease the slider value. On this case the slider acts as an Input Component.

User can not drag the slider object. Since the slider is linked to a formula, it will show the value that the formula calculates. On this case it is an Output Component.

Example of the Excel File

The following image shows the Excel file used in the example above.



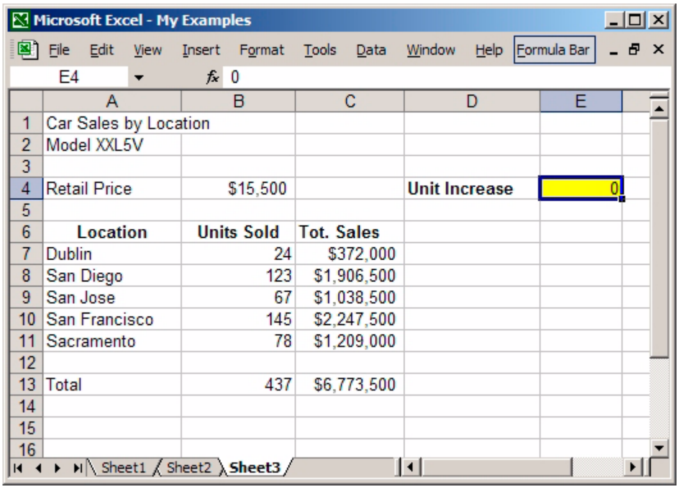
	A	B	C
1	Slider Example:		
2			
3	1		
4	2		Cell DOES NOT contain a formula
5	3		
6	4		
7			
8	10		Cell contains a formula: Sum(A3:A6)
9			
10			

Sample Model: Horizontal Slider

This section contains an example of how to use a single value component. We will use the Horizontal Slider to illustrate the example.

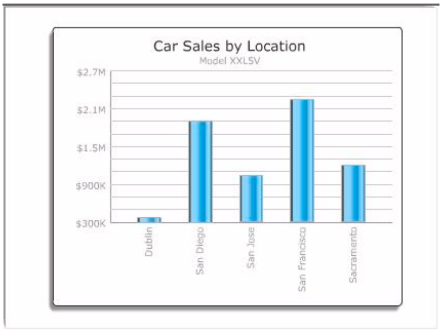
Example Imagine you are a carmaker supervisor responsible for reporting the sales of a certain car model on a per-store basis. You have a typical chart showing the stores and the total sales. Suppose that you want to create a simple “what-if” scenario that shows the impact of selling “N” number of additional cars. To accomplish this, all you need is a slider and a chart.

First, let's look at the sample Excel file shown below. It contains the number of Units sold by location, the retail price, and the total sales. The yellow cell contains the additional number of car sales that you want to simulate. As you modify the number of Unit Increase by one; the number of units sold changes accordingly. In the case of Dublin, the units sold will be 25, for San Diego, 124, and so on.



	A	B	C	D	E
1	Car Sales by Location				
2	Model XXL5V				
3					
4	Retail Price	$15,500		**Unit Increase**	0
5					
6	**Location**	**Units Sold**	**Tot. Sales**		
7	Dublin	24	$372,000		
8	San Diego	123	$1,906,500		
9	San Jose	67	$1,038,500		
10	San Francisco	145	$2,247,500		
11	Sacramento	78	$1,209,000		
12					
13	Total	437	$6,773,500		
14					
15					
16					

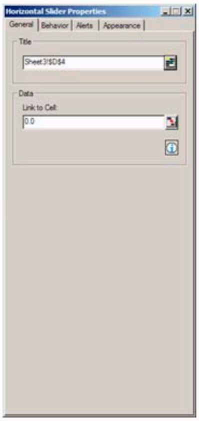
Once you build the Chart (see “Using the Chart Components” on page 77 for more detail), you can add the single value component and to create your “what-if” scenario. With the chart, your model will look like this:



Now, we can add real value to this model. We add a slider and link it to the Unit Increase cell so that when you move the slider, the unit increase affects the units sold, and revises the total sales.

The steps to add the slider are shown below:

1- Insert the slider on the canvas

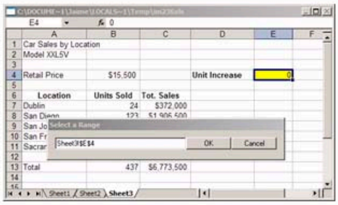


Title: Sheet3!$D$4

Data

Link to Cell: 0.0

2- Double click on the slider to edit the Property Window.



E4 f_x 0

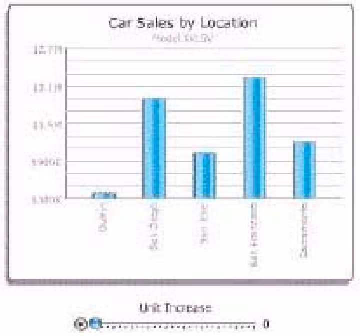
	A	B	C	D	E
1	Car Sales by Location				
2	Model XXL5V				
3					
4	Retail Price	$15,500		**Unit Increase**	0
5					
6	**Location**	**Units Sold**	**Tot. Sales**		
7	Dublin	24	$372,000		
8	San Diego	123	$1,906,500		
9	San Jo				
10	San Fr				
11	Sacrar				
12					
13	Total	437	$6,773,500		
14					

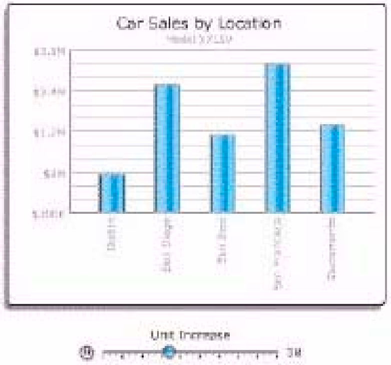
Select a Range: Sheet3!$E$4 OK Cancel

3- Link the slider to the respective cell

In some cases, you may need to modify the slider appearance and behavior. See “Unique Slider Settings” on page 398 for more information.

At the end, your “what-if” model is ready to be published and will look like this:





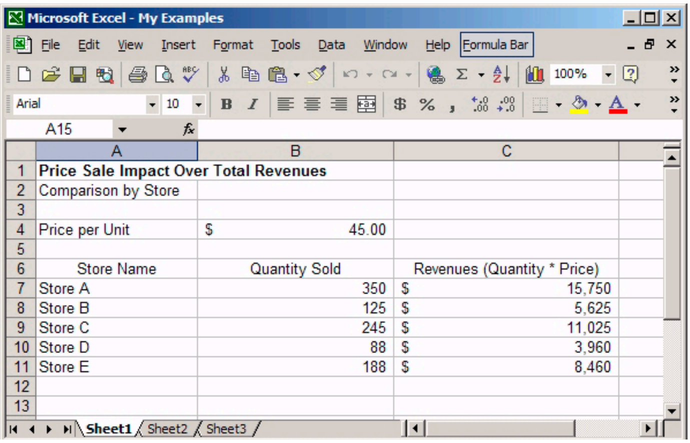
Note that by dragging the slider, the Unit Increase changes. This affects the total sales by location and produces hundreds of scenarios in a single chart.

Sample Model: Value Component

This section contains an example of how to use a single value component. We will use the Value Component to illustrate the example.

Example

Suppose you are a store supervisor who wants to measure the effect that increasing or decreasing the price of an X product has over a certain level of products normally sold over a period of time. The Excel file looks something like this:

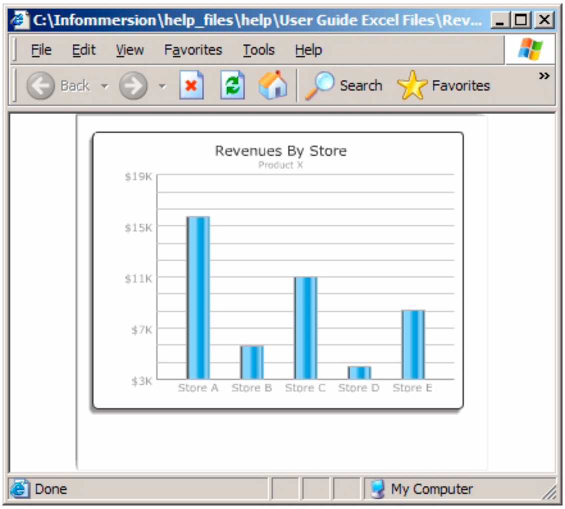


	A	B	C
1	**Price Sale Impact Over Total Revenues**		
2	Comparison by Store		
3			
4	Price per Unit	$ 45.00	
5			
6	Store Name	Quantity Sold	Revenues (Quantity * Price)
7	Store A	350	$ 15,750
8	Store B	125	$ 5,625
9	Store C	245	$ 11,025
10	Store D	88	$ 3,960
11	Store E	188	$ 8,460
12			
13			

- In this case, Price per Unit is the variable that we want to modify. This cell affects the revenues for all stores.
- Quantity sold is the normal volume of products sold over a period of time.
- Revenues are calculated as quantity * price.

Column Chart

We will add a column chart to show the revenues by store. See “Using the Chart Components” on page 77 for more information about how to create a chart.



Value Component

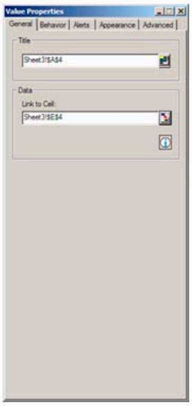
We will add a Value Component to show the price per unit.

To add a value component:

1. Double click on the Value Component and place it on the canvas area.

2. Double-click on it to call the Property Window and link it to the cell that contains the required value.

1- Insert a Value Component on the canvas

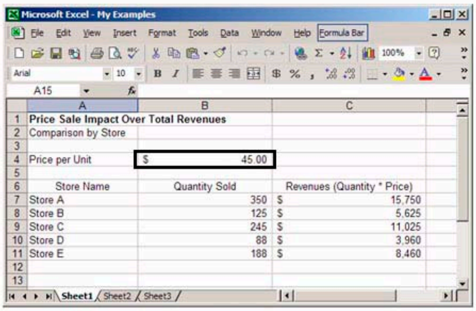


Title: Sheet3!$A$4

Data

Link to Cell: Sheet3!$E$4

2- Open the Property Window. Double Click on the Value Component.

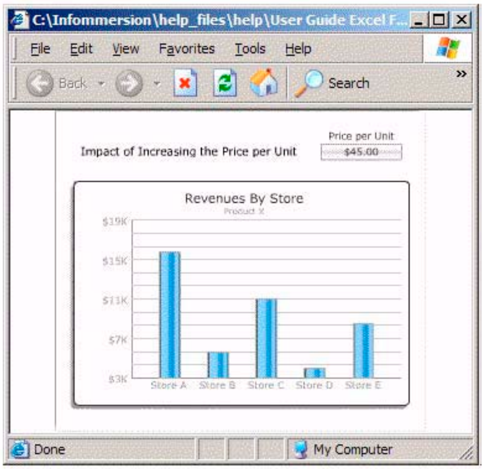


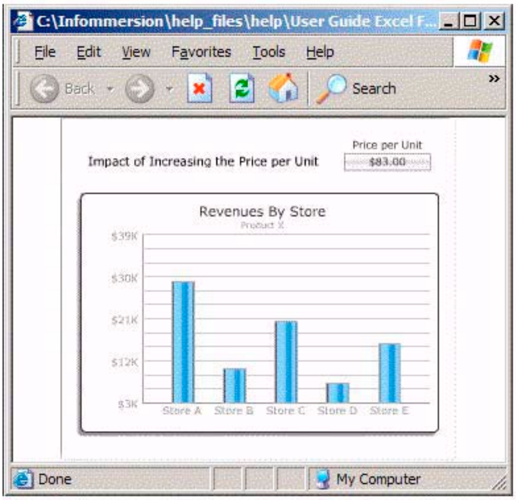
	A	B	C
1	**Price Sale Impact Over Total Revenues**		
2	Comparison by Store		
3			
4	Price per Unit	$ 45.00	
5			
6	Store Name	Quantity Sold	Revenues (Quantity * Price)
7	Store A	350	$ 15,750
8	Store B	125	$ 5,625
9	Store C	245	$ 11,025
10	Store D	88	$ 3,960
11	Store E	188	$ 8,460
12			
13			

3- Link the Value Component to the designed cell.

In some cases, you will need to modify the value component appearance and behavior. See *Section II for more information.

At this point, our model will look like this:





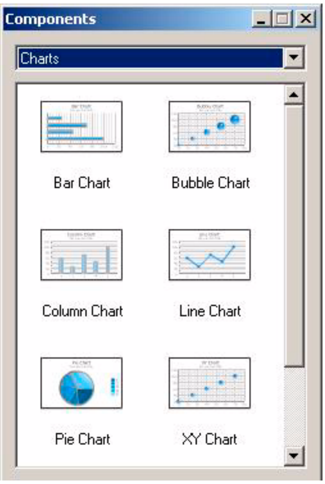
In this simple model, you can increase or decrease the Price per Unit by dragging the Value Component. Double-clicking the Value component will also allow you to type in the value. Since the Value Component is linked to a cell that affects the Revenues, the chart dynamically changes to reflect the new revenues by store.

Using the Chart Components

Charts are one of the most powerful ways to transmit your message. A well-created chart can transmit a real sense of value and time to any report. This section describes the basic functionality required to create a chart

Chart Types

Xcelsius provides the following chart types:



- **Grid**
  A dynamic table that represents a group of rows and columns. The grid lets you show just the data on any table, or permits data modification that can impact other components.
- **XY Chart**
  A powerful chart that displays data that requires two dimensions to complete the analysis. The XY chart shows each data point as a result of the intersection of X values and Y values. You can, for example, use the XY chart in models that compare ROI (X axis) against Market Value (Y axis) for a group of companies.
- **Pie Chart**
  A chart that represents the distribution or participation of each slide (item) over a certain total that is represented on the overall pie value. The Pie Chart is appropriate for models such as Revenue Contribution by Product. For a Revenue Contribution by Product pie chart the overall pie size represents the total revenues and each slice represents a different product.

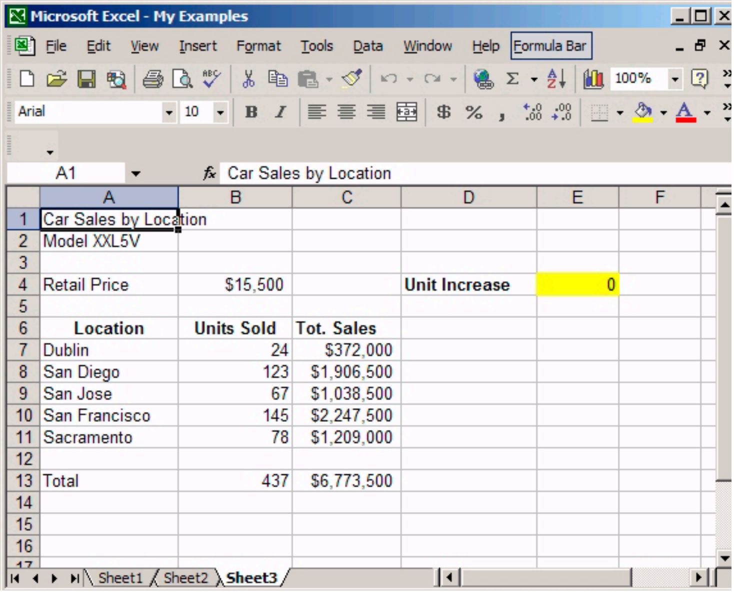
- **Line Chart**
  A single- or multi-line chart ideal for showing tendency over a period of time. Use this chart in models that emphasize a trend line or a continuing sequence of data. For example, Stocks Prices, Revenues History, and so on.
- **Column Chart** and **Bar Chart**
  A single- or multi-bar chart ideal for showing and comparing one or more items over a period of time or in a specific range of values. You might, for example, use a Column Chart in models that contain the quarterly head-count by region.
- **Combination Chart**
  A combination Column and Line chart ideal for displaying a range of values and a trend line for those values.
- **Stacked Column Chart** and **Stacked Bar Chart**
  A powerful chart that allows you compare several variables over a period of time. Stacked bars allow you to compare one or more variables by adding one variable on top of another. These type of charts are ideal when comparing several variables over a period of time i.e,: Marketing Cost, General Cost, Administrative Cost. Each one of the cost components is presented in a different color and each portion represents a different variable. The total bar size represents the Total Cost.
- **Bubble Chart**
  Despite its apparent complexity, the bubble chart is one of the most powerful analytic tools available. It lets you compare a group of items or series based on three different parameters. It has an X axis and Y axis to represent the item location over the chart area, and a Z value to represent the item size.

  You could, for example, use this chart to represent the stock market composition with the X axis representing the ROI by industry type, the Y axis representing the Cash Flow, and the Z axis representing the Market Value. You will be pleased with the results.

How to Create a Chart

Creating a chart in Xcelsius is similar to creating a chart in Excel. The minimum requirement is to have a list of values in a contiguous range of cells. After this, you can enhance your chart with some basic information like Title, Subtitle, Axis Titles and Series Names. The following is a simple example of how to create a chart in Xcelsius.

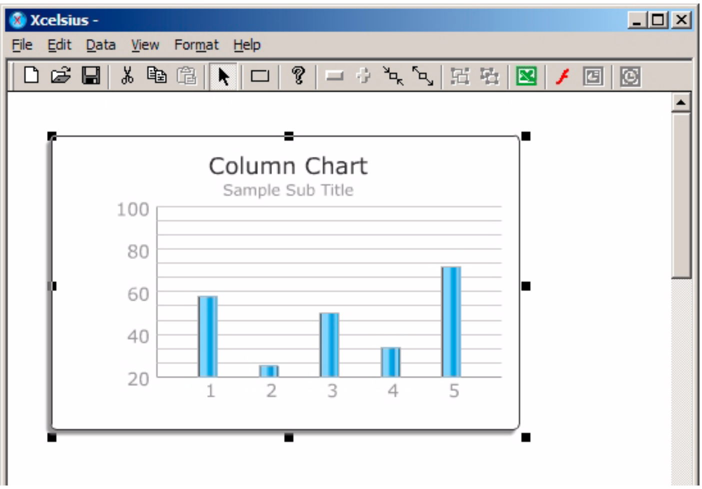
Example Suppose you need to show the Revenues per Store for a Car Dealer company. You will need an Excel file that contains a contiguous range of cells with this information. Ideally, your Excel file should look like the following example:



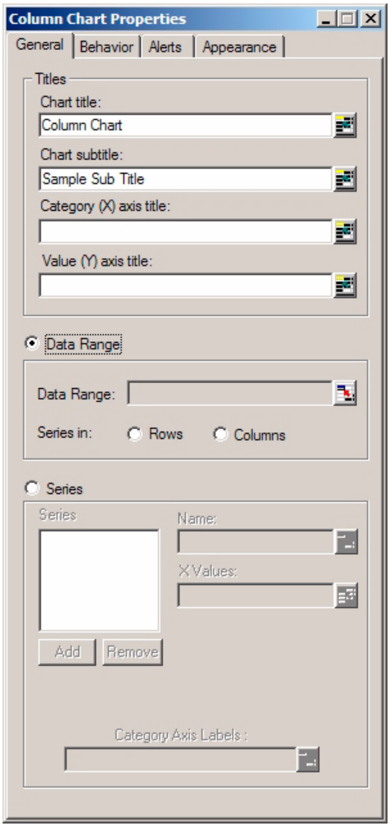
A1 Car Sales by Location

	A	B	C	D	E	F
1	Car Sales by Location					
2	Model XXL5V					
3						
4	Retail Price	$15,500		**Unit Increase**	0	
5						
6	**Location**	**Units Sold**	**Tot. Sales**			
7	Dublin	24	$372,000			
8	San Diego	123	$1,906,500			
9	San Jose	67	$1,038,500			
10	San Francisco	145	$2,247,500			
11	Sacramento	78	$1,209,000			
12						
13	Total	437	$6,773,500			
14						
15						
16						

1. After you import the Excel file into Xcelsius, insert a chart into the canvas area.



2. Click the chart to open the Property Window. Here you can select the data sources and modify the chart's appearance.



Column Chart Properties

Chart title: Column Chart

Chart subtitle: Sample Sub Title

● Data Range

Important: Review the information on Dynamic Vs. Static Data Sources on page 35.

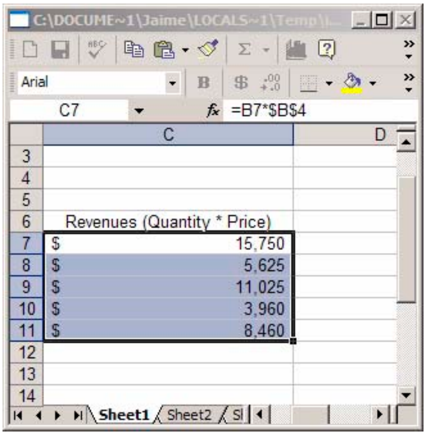
3. Click the Chart Title icon to select the chart title from the spreadsheet or type in the title name.

4. Click the Chart Subtitle icon to select the chart subtitle from the spreadsheet or type in the subtitle name.

5. Click the Category (X) icon to select the axis title from the spreadsheet or type in the axis name.

6. Click the Category (Y) icon to select the axis title from the spreadsheet or type in the axis name.

7. Click the icon to select a Data Range. The data range is the list of values to be presented on the chart. After you click on the icon, select the full range of values that you want to display on the chart.



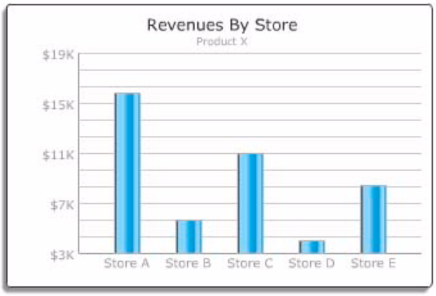
C7 =B7*$B$4

	C	D
3		
4		
5		
6	Revenues (Quantity * Price)	
7	$ 15,750	
8	$ 5,625	
9	$ 11,025	
10	$ 3,960	
11	$ 8,460	
12		
13		
14		

The Category Axis Labels option becomes available after you select the chart data range. The Category Axis Labels contains the names of each data series, for example, FY2002, FY2001, FY2000, etc.

In some cases, you must create a multiple bar chart. To do this, simply select the Series options and select one or more series. Each series represents one group of bars that are represented with the same color.

With these simple steps, your chart will look similar to the chart below:



Additional Options to Enhance Your Charts

Xcelsius provides a set of powerful functions to help enhance your charts. Consult “Charts” on page 256 for a detailed description of each function. Here we will describe the most significant functionality of some of these options:

- **Scale Behavior**
  Designed to help you control the minimum and maximum limits of each axis. By default, the application is set to Auto Scale, which automatically assures a good limit for the data that you have selected. However, in some situations you might need to modify the limits. Auto Zoom Out and Manual scale allow you do just that - to personalize the axis limits.
- **Run Time Options**
  These options apply in situations where you want to transfer some control to the final user. When you use these options, a small icon is placed on top of the chart. This icon lets the final user reset and control the axis limits and behavior.
- **Alerts**
  A powerful feature that lets you set targets for each chart component. When you use alerts in a chart, each data set is represented with an alert color depending on the comparison of actual data against target data.

- **Appearance Functions**
  A collection of five sub-tabs that let you enrich the chart appearance. Most of these functions are self-explanatory and commonly used in any Windows application. With these options, you can change the chart colors, bars or lines widths, adjust the transparency level, change the value format ($,%, etc.), adjust margins, increase or decrease the number of gridlines, change gridlines colors and many more options.

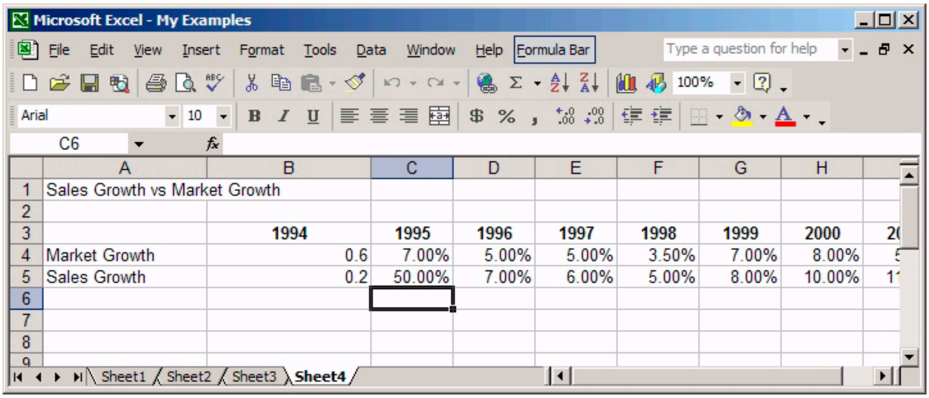
Sample Model: Line Chart

This section contains an example of how to create a chart. We will use the line chart to illustrate the example.

Example

Assume you need to create a chart that shows the average sales growth rate of your company against the market growth rate. You have the information for the last 10 years and you have decided that the best way to show the trend and growth rate is by using a line chart.

Typically, the Excel file in which you have this data will look like this:



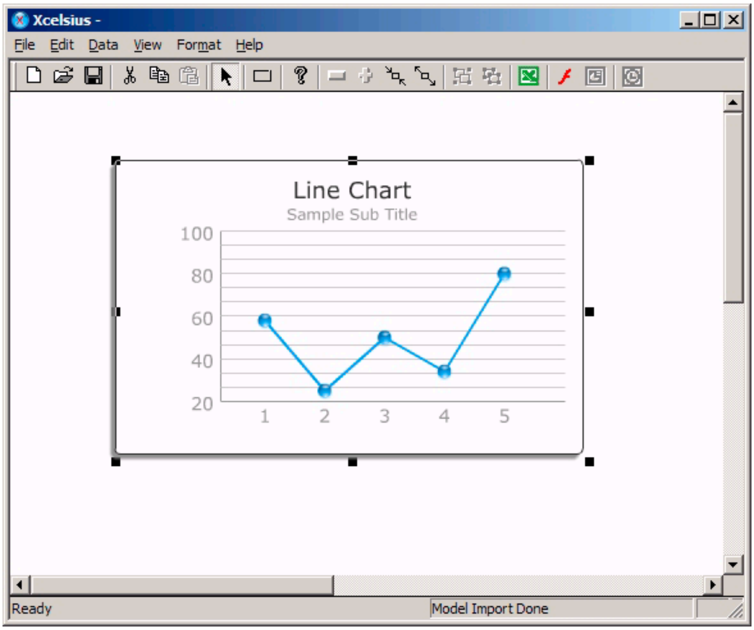
	A	B	C	D	E	F	G	H	I
1	Sales Growth vs Market Growth								
2									
3		1994	1995	1996	1997	1998	1999	2000	2
4	Market Growth	0.6	7.00%	5.00%	5.00%	3.50%	7.00%	8.00%	5
5	Sales Growth	0.2	50.00%	7.00%	6.00%	5.00%	8.00%	10.00%	1
6									
7									
8									

The Excel file contains the growth rates for 10 years of information. The data is displayed by columns and the series (market growth and sales growth) are displayed in rows.

With this basic Excel file, we are ready to create the line chart.

1. After the Excel file has been imported into Xcelsius, the first step is to add a new line chart in the canvas area. This is done by selecting the line chart and clicking on the white canvas area.

   At this point, your model will look like this:



2. Assign source data to the chart. With this step, we link the line chart to the recently imported Excel file. Double-click on the Line chart to display the Property Window. Then select the General tab to begin configuring the chart parameters.

3. Click the Chart Title icon to select the title from the spreadsheet, or enter the desired text.

4. Click the Chart Sub Title icon to select the Sub Title from the spreadsheet, or enter the desired text.

5. Click the X and Y icons to select the axis text, or enter the desired axis text.

6. Click the Data Range icon to select the chart data. Depending on how the data is contained on the spreadsheet, you can select the Rows or Columns icon.

   By default, click on the icon and the application will recognize if the data is contained in rows or columns. You can then adjust your selection if the results are not what you were expecting.

   In some cases, you may have a series of data in different places on the spreadsheet. For example you may have the Market Growth rate in different rows and columns than the company growth rate. In these cases, click on the Series option, add as many series as you need and select the data (X Values icon).

7. The Category Axis Labels becomes visible after a data has been assigned. Click the Category Axis labels to select the labels from the spreadsheet.

The following picture shows how to assign the data for our example:

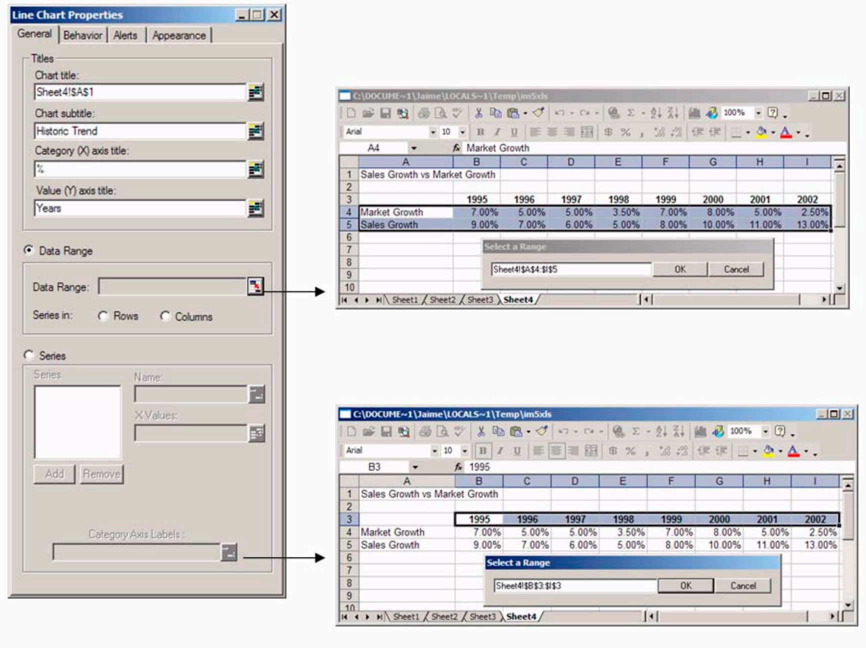


Chart title: Sheet4!$A$1

Chart subtitle: Historic Trend

Category (X) axis title: %

Value (Y) axis title: Years

● Data Range

Data Range:

Series in: ○ Rows ○ Columns

○ Series

A4 Market Growth

	A	B	C	D	E	F	G	H	I
1	Sales Growth vs Market Growth								
2									
3		1995	1996	1997	1998	1999	2000	2001	2002
4	Market Growth	7.00%	5.00%	5.00%	3.50%	7.00%	8.00%	5.00%	2.50%
5	Sales Growth	9.00%	7.00%	6.00%	5.00%	8.00%	10.00%	11.00%	13.00%

Select a Range: Sheet4!$A$4:$I$5

B3 1995

Select a Range: Sheet4!$B$3:$I$3

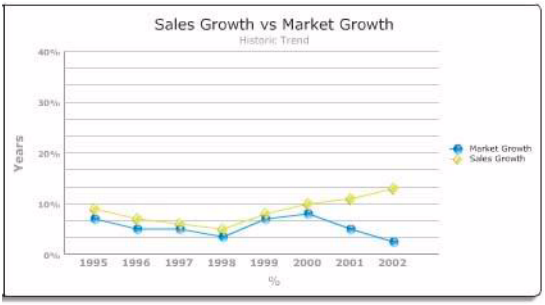
8. Select the growth rates for the 10-year trend. You can include in your selection the series name (as in the example) or you can add it manually after your selection has been made.

9. Select the Category Axis Labels. In this case, the labels are the 10 fiscal years, 1995, 1996, and so on. This option becomes visible after making a data selection.

   Your chart is almost ready. It just needs to be resized or adjusted to fit the chart area.

10. To resize the chart, simply click on the chart and drag and drop the chart border. If the chart title is too big, or the chart area is too small, you can adjust all of these features using the functions included on the appearance tab.

Once the chart is resized, it will look like this:



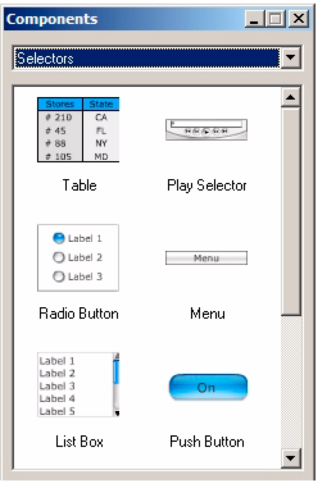
Your chart is now ready to be published. As we will see later, when you combine charts and other components (such as Selectors), you can create truly dynamic models whose charts react to changes in other components.

Summarizing the steps:

1. Import the Excel file
2. Insert the chart into the canvas area
3. Assign the data sources and category axis labels form the spreadsheet
4. Add title, subtitle and axis names
5. Resize and adjust its format
6. Publish the chart

Using the Selector Components

Selectors are the most powerful components. Their functionality lets you create a model with multiple selections. When you combine a selector with any other component (such as charts), the result is a powerfully dynamic model that is both elegant and easy to create.



- **Table**
  The Table component is a "What you see is what you get" representation of any group of cells from your Excel file. In addition to this, each row allows multiple selections. For example, you can use the table to display a Balance Sheet for two years. When you click on each row, the table will display an additional chart that shows the historic balance for each account.
- **Play Selector**
  The play selector sequentially inserts one row or column from a defined range. You can then use that row to create a chart that changes each time that the play selector inserts a row or column. For example, use the play selector in models that show the Sales by a large number of Sales Representatives. Instead of having to click several times to display a chart for each Sales Representative, you can create a model that automatically run the charts with just one click.

- **Radio Button**, **Menu, Combo Box,** and **List Box**
  Some of the industry favorites. These components allow one selection at a time from a group of selectable items. They are easy to use and understand.
- **Push Button** and **Check Box**
  A mobile set of selectors that have two positions: ON & OFF. With each position, the content displayed may vary depending on your needs.
- **Filter**
  The Filter component takes a range of data that shares a common number of items and “filters” the content so that there are no duplicated records.

One of the most important characteristics of Xcelsius is how easy it is to create a model using selectors. Typically, to use selectors you would need to create or use a program that is not easy to understand. At a minimum, you would need some programming skills. With Xcelsius, you will be surprised at two things:

- How easy it is to use
- How powerful your models will be.

For your convenience, we have created a series of self-running animations describing each selector's functionality. These animations are available on the Property Window of each selector. Just bring up the property window for the component and then click the icon shown in the margin. The animation will run automatically.

Selectors Functionality

The following are the selector behaviors included in Xcelsius:

- **Position**
  Each selection item position is inserted into a target cell. For example, if you use a radio button, the first button will be Button #1, the second will be Button #2, and so on. As a user, you define a target cell in the spreadsheet. With each selection that you make, the radio button inserts the button position in the target cell.

  Recommended Use: Use the Position function when working with Excel Lookup functions or Excel What-if formulas.

- **Label**
  Each selection inserts its label cell into a target cell.

  For example, if you use a Menu selector that contains Country names, the country name is inserted into the target cell with each selection.

  Recommended Use: Use the label function when working with Excel Lookup functions or when using Excel What-if formulas.

- **Value**
  The value that belongs to each selector item is inserted into the target cell.

  For example, if you are using a radio button to display countries and sell values, with each selection the respective sell amount will be inserted into the target cell.

  Recommended Use: Use the Value function to display a single cell that contains one value for each selector item. You can then use other component (such as a Value component) to display the selected value. The value changes with each selection.

- **Row**
  Each selector item represents one row of data. With each selection, the selector inserts the respective row into the target cell.

  For example, if you use the List Box to display annual sales by state, the selector contains the 50 state names. Each state has data that shows the sell amounts over a period of time.

  With each selection, the selector takes the respective row and inserts it into the target cell. You can then link a chart to the same target cell.

  The result: The chart changes its content with each selector selection.

  Recommended Use: Use the row function in models that contain data categorized in rows, in models where you use dynamic charts or in models where the selector contains more than one cell of data.

- **Column**
  Each selector item represents one column of data. With each selection, the selector inserts the respective column into the target cell.

  For example, if you use the Radio Button to display annual sales by sales representative, the selector contains the N number of sales representative names. Each sales representative contains data for sales over a period of time.

  With each selection, the selector takes the respective column and inserts it into the target cell. You can then use a chart and link the chart to the same target cell. The result: The chart changes its content with each selector selection.

  Recommended Use: Use the column function in models that contain data categorized in columns, in models where you use dynamic charts or in models where the selector contains more than one cell of data.

- **Status List**
  This is one of the most powerful functions. Each selector item is linked to a contiguous range of cells in the spreadsheet. When an item is selected, the application. inserts the number 1 into the respective cell. All other cells contain the number 0 (zero). Xcelsius recognizes that when the Dynamic Visibility of a component is linked to a cell that contains the number 1, the component is visible. Xcelsius also understands that numbers other than 1 mean the component is invisible (not displayed).

  Using this function, you can link different chart types to the same selector. For example, the first item will show a line chart, the second will show a pie chart, and the third will show a USA map.

  Recommended Use: Use the status list to display different charts or other components that are visible or invisible, according with the selector selection.

The following table contains the functions or behavior that apply to each selector:

	Functions					
Selector	*Position*	*Label*	*Value*	*Row*	*Column*	*Status List*
Table				**X**		
Play Selector				**X**	**X**	
Radio Button	**X**	**X**	**X**	**X**	**X**	**X**
Menu	**X**	**X**	**X**	**X**	**X**	**X**
List Box	**X**	**X**	**X**	**X**	**X**	**X**
Push Button			**X**			
Filter				**X**		
Combo Box	**X**	**X**	**X**	**X**	**X**	**X**
Check Box			**X**			

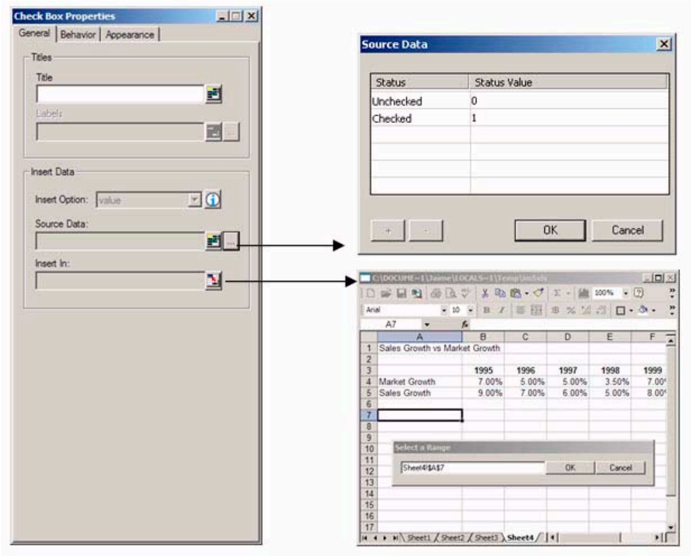
See “Selectors” on page 304 for more detailed information about each selector.

Sample Model: Check Box

This section provides an example of Selectors functionality using the Check Box selector to illustrate.

The Check Box is a simple selector that uses the Value function. It has two positions, checked and unchecked. When the check box is checked, it inserts a certain value on the target cell. When the status is unchecked, it inserts a different value. Both values are defined by the designer when creating a model.

Let's explore how the check box works:



Insert Option: value

Status	Status Value
Unchecked	0
Checked	1

A7

	A	B	C	D	E	F
1	Sales Growth vs Market Growth					
2						
3		1995	1996	1997	1998	1999
4	Market Growth	7.00%	5.00%	5.00%	3.50%	7.00
5	Sales Growth	9.00%	7.00%	6.00%	5.00%	8.00

Sheet4!$A$7

In the Source Data area, we selected two values: 0 and 1. The number 0 indicates that the check box is unchecked, while 1 indicates that the check box is checked. You can select any values that you need.

In the Insert In area, we selected the cell A7 as the destination or target row. You can select any empty cell that you want.

When the check box is checked, the check box inserts the number 0 in the target cell A7. When the check box is unchecked, it inserts the number 1 in the target cell A7.

☐ Check Box is unchecked: The number Zero (0) is inserted in the target cell.

☑ Check Box is checked: The number One (1) is inserted in the target cell.

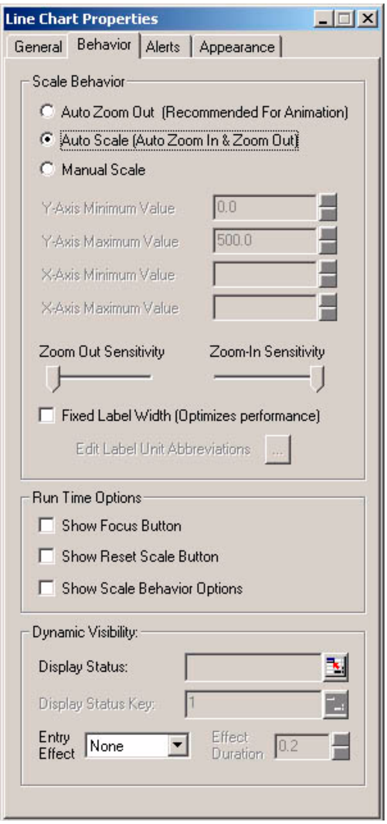
Check Box functionality can become powerful when combined with other components using the Dynamic Visibility function. See “Introduction to Dynamic Visibility Functionality” on page 150 for more information.

Suppose that when a component using Dynamic Visibility is linked to a cell that contains the number 1, the component becomes visible. Any other number or value means that the component is invisible (hidden). If you combine the Check Box and another component using the Dynamic Visibility function, the result is extremely powerful.

Suppose you want to create a model that gives the user the option to show or hide a chart. Once you configure the chart (see “Using the Chart Components” on page 77 for more information), you use the chart's Dynamic Visibility functionality to link the chart's Display Status parameter to the Check Box Target cell (in this case, cell A7).

To set this up:

1. Click the Chart to edit the Property Window.



Scale Behavior

○ Auto Zoom Out (Recommended For Animation)
● Auto Scale (Auto Zoom In & Zoom Out)
○ Manual Scale

Y-Axis Minimum Value: 0.0
Y-Axis Maximum Value: 500.0
X-Axis Minimum Value:
X-Axis Maximum Value:

Zoom Out Sensitivity
Zoom-In Sensitivity

☐ Fixed Label Width (Optimizes performance)
Edit Label Unit Abbreviations ...

Run Time Options

☐ Show Focus Button
☐ Show Reset Scale Button
☐ Show Scale Behavior Options

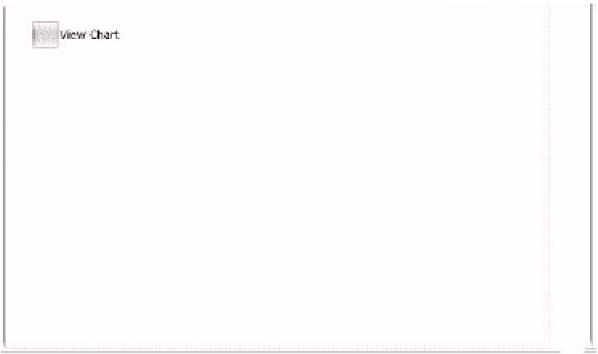
Dynamic Visibility:

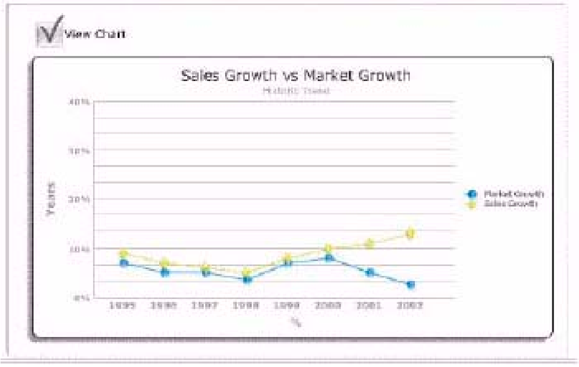
Display Status:
Display Status Key: 1
Entry Effect: None
Effect Duration: 0.2

2. Click the Behavior tab (second tab from left to right).

3. Click the Dynamic Visibility icon and link it to the Check Box target cell (in this case, A7).

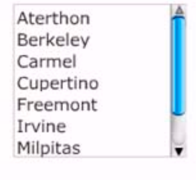
   The model is ready to be tested and published. By default, when you run the model, the chart won't be visible. Users must click on the Check Box to enable the chart. This function adds interesting effects to your presentations.





Sample Model: List Box

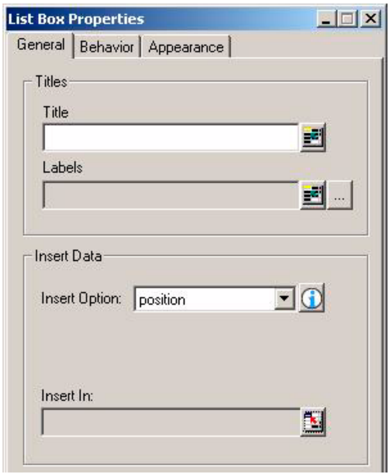
This section provides an example of the Selectors functionality using the Insert in Row function. We will use the List Box selector to illustrate the example.



The List Box is a selector that lets you make **one** selection at a time from a list of possible selections. In Xcelsius, you can configure the selection to be made by a mouse click or a mouse over.

General Tab

Let's review some of the most relevant features of the List Box:



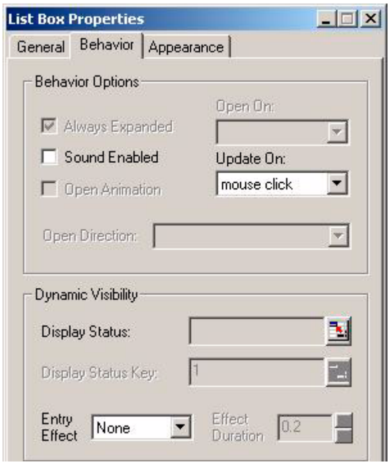
Insert Option: position

- Click the Title selection icon to select the List Box title from the Spreadsheet, or enter the text.
- Click the Labels selection icon to select the List Box Labels from the spreadsheet, or enter the label names. Labels are the items that appear on the List Box itself.

  For example, in the current picture, the words “Aterthon”, “Berkley”, etc. are the List Box labels. You can use any labels that you want, such as Country Names (Argentina, Brazil, USA, Taiwan, etc.).

- Choose the Insert Option that applies to your model. See page 90 for more information about Insert Options.
- Select the Insert In range. This is the range or cells that contains the values that are inserted with each List Box selection.

Behavior Tab

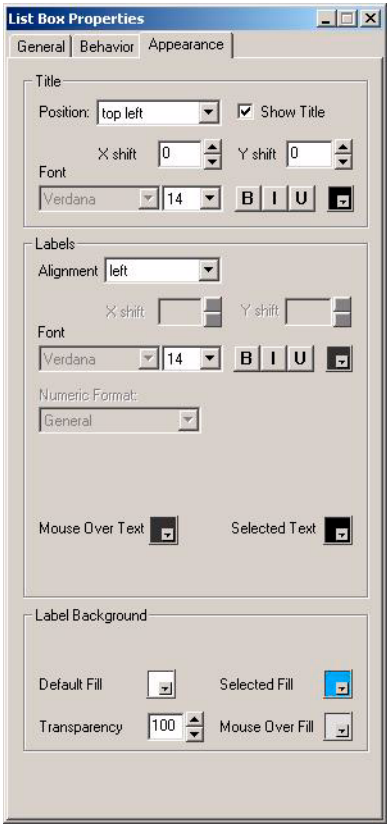


☑ Always Expanded
☐ Sound Enabled
☐ Open Animation
Update On: mouse click
Display Status Key: 1
Entry Effect: None
Effect Duration: 0.2

- The Behavior tab lets you specify whether the List Box will have a sound. The sound is a friendly “click” that occurs when a selection is made.
- The Update On option lets you specify whether the selection is made at mouse click or at mouse over. We recommend you select mouse click if, after selecting an item, you can go to another area in the model. We recommend mouse over when the selection shows a chart or other component, but you don't have any other interactivity with the model.
- The Dynamic Visibility Option controls the Display Status, Entry Effect, and Effect Duration. See “Introduction to Dynamic Visibility Functionality” on page 150 for more information.

Appearance Tab

The Appearance tab has functions for modifying the appearance of the List Box.



Position: top left

☑ Show Title

X shift 0

Y shift 0

Font Verdana 14

Alignment left

X shift

Y shift

Font Verdana 14

Numeric Format: General

Transparency 100

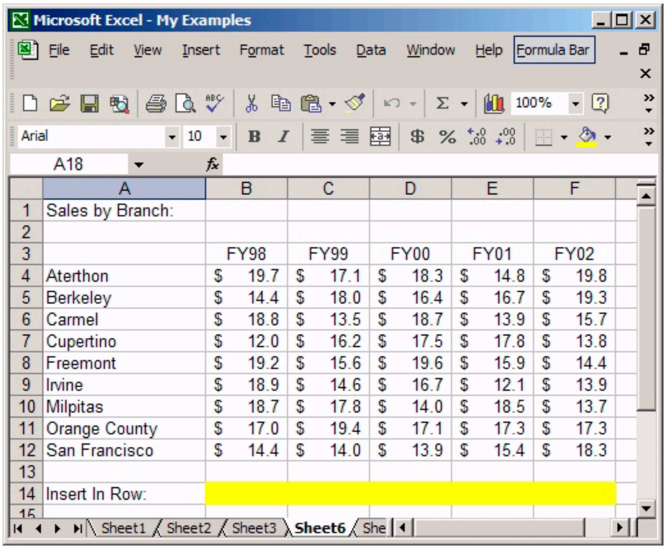
- Click the Show Title combo box to enable or disable the List Box title, change the title position, size, color, and font style.
- In the Labels section you can align the labels (left, right, center) and change the font size, color, and style. Additionally, you can configure the colors that indicate when a selection has been made (Mouse Over Text, Selected Text).

- The Label Background options let you customize the colors and appearance of the background area that contains the labels. By default, we have selected a professional and user-friendly look. If required, you can change it to suit your needs.

Example

Suppose you need to create a model that shows different branches and the net revenues over a period of years. You want to show branch-by-branch using a List Box and a Column Chart. The List Box will use the Insert in Row function, so that with each selection, a row that contains the net revenues by the selected branch is inserted in the range that is linked to the chart. Let's review some instructions:

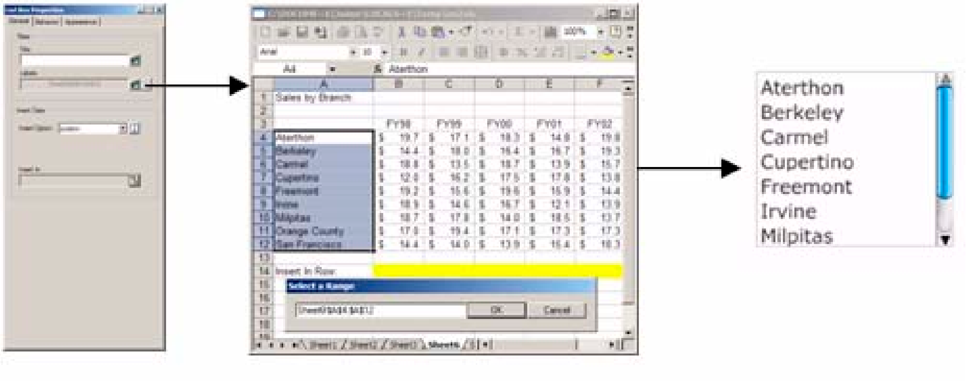
1. Typically, your Excel file will look like the figure below. It contains the list of branches and the revenues for years 1998 to 2002. Since you want to use the Insert in Row function, it is a good idea to highlight the row that is going to be used as the target range.



	A	B	C	D	E	F
1	Sales by Branch:					
2						
3		FY98	FY99	FY00	FY01	FY02
4	Aterthon	$ 19.7	$ 17.1	$ 18.3	$ 14.8	$ 19.8
5	Berkeley	$ 14.4	$ 18.0	$ 16.4	$ 16.7	$ 19.3
6	Carmel	$ 18.8	$ 13.5	$ 18.7	$ 13.9	$ 15.7
7	Cupertino	$ 12.0	$ 16.2	$ 17.5	$ 17.8	$ 13.8
8	Freemont	$ 19.2	$ 15.6	$ 19.6	$ 15.9	$ 14.4
9	Irvine	$ 18.9	$ 14.6	$ 16.7	$ 12.1	$ 13.9
10	Milpitas	$ 18.7	$ 17.8	$ 14.0	$ 18.5	$ 13.7
11	Orange County	$ 17.0	$ 19.4	$ 17.1	$ 17.3	$ 17.3
12	San Francisco	$ 14.4	$ 14.0	$ 13.9	$ 15.4	$ 18.3
13						
14	Insert In Row:					

After the Excel file is imported into Xcelsius, insert the List Box on the canvas area and link it to the spreadsheet.

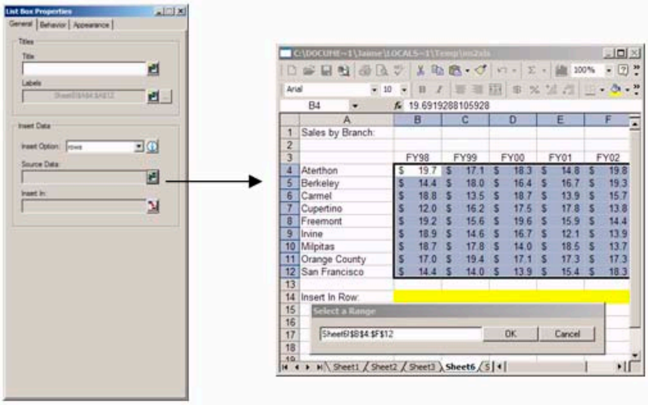
2. From the Property Window, click on the Labels icon and select the branch names as shown below:



3. On the Insert Data menu, select the Insert in Row Function.

4. Click the Source Data icon and select the range that contains the data to be inserted. In this case, select the range B4:F12. With this action, the List Box inserts row-by-row the selected range depending on the selection that is made.

5. Indicate where you want the row values to be inserted by clicking the Insert In icon and selecting the range B14:F14.

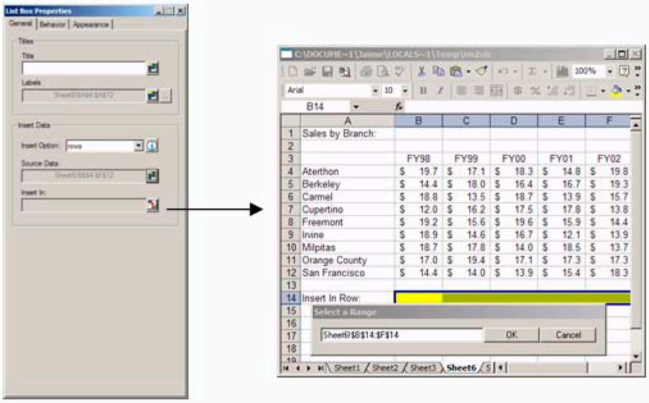


Insert Option: rows

B4 19.6919288105928

	A	B	C	D	E	F
1	Sales by Branch:					
2						
3		FY98	FY99	FY00	FY01	FY02
4	Aterthon	$ 19.7	$ 17.1	$ 18.3	$ 14.8	$ 19.8
5	Berkeley	$ 14.4	$ 18.0	$ 16.4	$ 16.7	$ 19.3
6	Carmel	$ 18.8	$ 13.5	$ 18.7	$ 13.9	$ 15.7
7	Cupertino	$ 12.0	$ 16.2	$ 17.5	$ 17.8	$ 13.8
8	Freemont	$ 19.2	$ 15.6	$ 19.6	$ 15.9	$ 14.4
9	Irvine	$ 18.9	$ 14.6	$ 16.7	$ 12.1	$ 13.9
10	Milpitas	$ 18.7	$ 17.8	$ 14.0	$ 18.5	$ 13.7
11	Orange County	$ 17.0	$ 19.4	$ 17.1	$ 17.3	$ 17.3
12	San Francisco	$ 14.4	$ 14.0	$ 13.9	$ 15.4	$ 18.3
13						
14	Insert In Row:					

Sheet6!$B$4:$F$12



Insert Option: rows

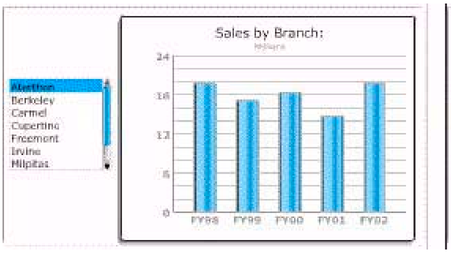
B14

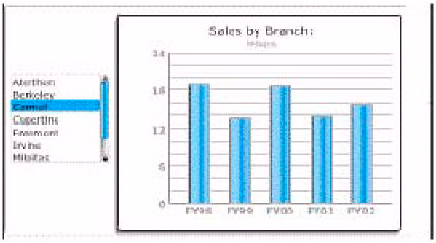
	A	B	C	D	E	F
1	Sales by Branch:					
2						
3		FY98	FY99	FY00	FY01	FY02
4	Aterthon	$ 19.7	$ 17.1	$ 18.3	$ 14.8	$ 19.8
5	Berkeley	$ 14.4	$ 18.0	$ 16.4	$ 16.7	$ 19.3
6	Carmel	$ 18.8	$ 13.5	$ 18.7	$ 13.9	$ 15.7
7	Cupertino	$ 12.0	$ 16.2	$ 17.5	$ 17.8	$ 13.8
8	Freemont	$ 19.2	$ 15.6	$ 19.6	$ 15.9	$ 14.4
9	Irvine	$ 18.9	$ 14.6	$ 16.7	$ 12.1	$ 13.9
10	Milpitas	$ 18.7	$ 17.8	$ 14.0	$ 18.5	$ 13.7
11	Orange County	$ 17.0	$ 19.4	$ 17.1	$ 17.3	$ 17.3
12	San Francisco	$ 14.4	$ 14.0	$ 13.9	$ 15.4	$ 18.3
13						
14	Insert In Row:					

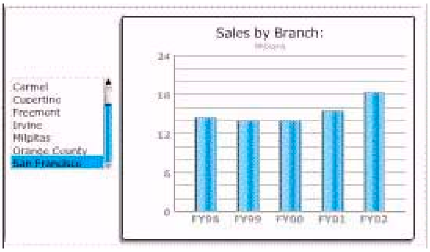
Sheet6!$B$14:$F$14

6. The List Box is now ready. The final step in the configuration process is to insert and link the column chart to the selected Insert In range. See page 77 for more information about how to use Charts.

After you create the chart, your model will look like the following. Note that with each selection made, the chart changes dynamically.







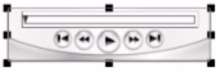
Sample Model: Play Selector

The Play Selector is a component that continually inserts a series of rows or columns into a target range. It is ideal when you are creating a model that displays a large range of data or when you want to create a movie effect.

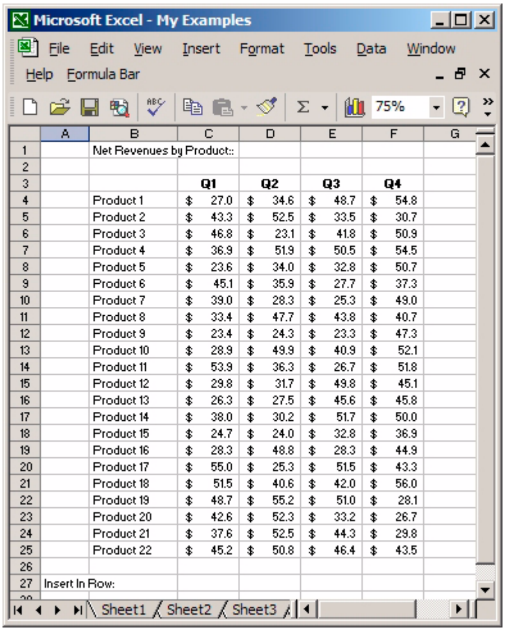
Suppose you want to show the revenues by product for a retail company. Most probably, you will have 20 or more products that you need to track. You can use a Combo Box, Radio Button, or List Box to display the product and a chart to show the revenues over the last months.

However, the final user will have to click as many times as there are products in the selector to see all product charts. The Play Selector runs product by product, like a movie, allowing you to go backward and forward or stop the presentation at any time.

Play Selector component:



The following displays a typical Excel file that contains data for a series of products:



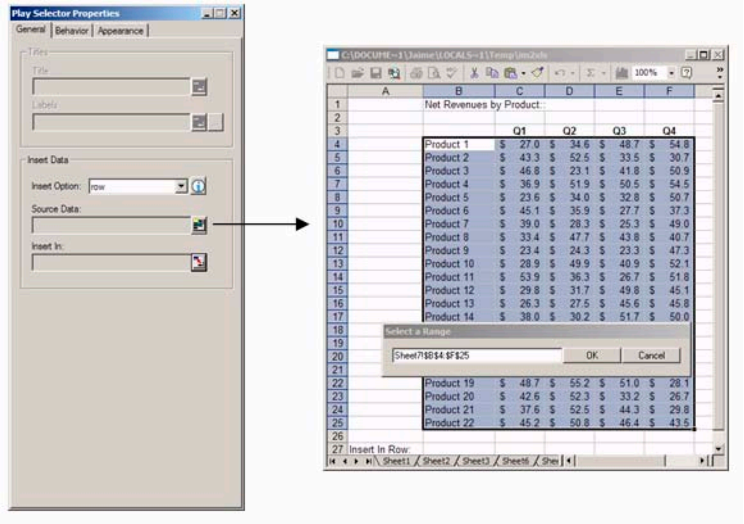
	A	B	C	D	E	F	G
1		Net Revenues by Product::					
2							
3			**Q1**	**Q2**	**Q3**	**Q4**	
4		Product 1	$ 27.0	$ 34.6	$ 48.7	$ 54.8	
5		Product 2	$ 43.3	$ 52.5	$ 33.5	$ 30.7	
6		Product 3	$ 46.8	$ 23.1	$ 41.8	$ 50.9	
7		Product 4	$ 36.9	$ 51.9	$ 50.5	$ 54.5	
8		Product 5	$ 23.6	$ 34.0	$ 32.8	$ 50.7	
9		Product 6	$ 45.1	$ 35.9	$ 27.7	$ 37.3	
10		Product 7	$ 39.0	$ 28.3	$ 25.3	$ 49.0	
11		Product 8	$ 33.4	$ 47.7	$ 43.8	$ 40.7	
12		Product 9	$ 23.4	$ 24.3	$ 23.3	$ 47.3	
13		Product 10	$ 28.9	$ 49.9	$ 40.9	$ 52.1	
14		Product 11	$ 53.9	$ 36.3	$ 26.7	$ 51.8	
15		Product 12	$ 29.8	$ 31.7	$ 49.8	$ 45.1	
16		Product 13	$ 26.3	$ 27.5	$ 45.6	$ 45.8	
17		Product 14	$ 38.0	$ 30.2	$ 51.7	$ 50.0	
18		Product 15	$ 24.7	$ 24.0	$ 32.8	$ 36.9	
19		Product 16	$ 28.3	$ 48.8	$ 28.3	$ 44.9	
20		Product 17	$ 55.0	$ 25.3	$ 51.5	$ 43.3	
21		Product 18	$ 51.5	$ 40.6	$ 42.0	$ 56.0	
22		Product 19	$ 48.7	$ 55.2	$ 51.0	$ 28.1	
23		Product 20	$ 42.6	$ 52.3	$ 33.2	$ 26.7	
24		Product 21	$ 37.6	$ 52.5	$ 44.3	$ 29.8	
25		Product 22	$ 45.2	$ 50.8	$ 46.4	$ 43.5	
26							
27	Insert In Row:						

Using the above Excel file, we are going to create a model that contains a Play Selector and a Column Chart. The Play Selector systematically inserts row by row into the designed Insert In row (B27:F27). The Column chart shows the data that is inserted into the Insert In row. The result is a dynamic model that runs like a “movie.”

To do this:

1. After the Excel file is imported, place a Play Selector in the Canvas Area and open the Property Sheet.

2. Select the Insert in Row function and click on the Source Data icon. Select the range that contains the data with the product names and revenues (B4:F25).



Insert Option: row

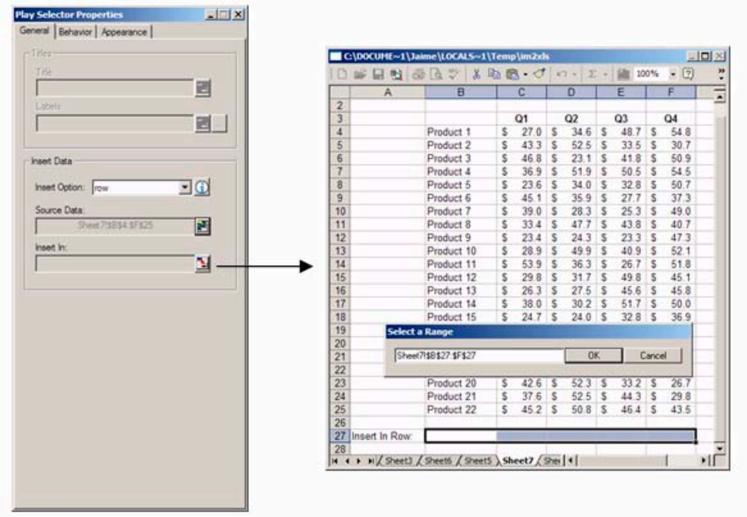
Net Revenues by Product::

	Q1	Q2	Q3	Q4
Product 1	$ 27.0	$ 34.6	$ 48.7	$ 54.8
Product 2	$ 43.3	$ 52.5	$ 33.5	$ 30.7
Product 3	$ 46.8	$ 23.1	$ 41.8	$ 50.9
Product 4	$ 36.9	$ 51.9	$ 50.5	$ 54.5
Product 5	$ 23.6	$ 34.0	$ 32.8	$ 50.7
Product 6	$ 45.1	$ 35.9	$ 27.7	$ 37.3
Product 7	$ 39.0	$ 28.3	$ 25.3	$ 49.0
Product 8	$ 33.4	$ 47.7	$ 43.8	$ 40.7
Product 9	$ 23.4	$ 24.3	$ 23.3	$ 47.3
Product 10	$ 28.9	$ 49.9	$ 40.9	$ 52.1
Product 11	$ 53.9	$ 36.3	$ 26.7	$ 51.8
Product 12	$ 29.8	$ 31.7	$ 49.8	$ 45.1
Product 13	$ 26.3	$ 27.5	$ 45.6	$ 45.8
Product 14	$ 38.0	$ 30.2	$ 51.7	$ 50.0
Product 19	$ 48.7	$ 55.2	$ 51.0	$ 28.1
Product 20	$ 42.6	$ 52.3	$ 33.2	$ 26.7
Product 21	$ 37.6	$ 52.5	$ 44.3	$ 29.8
Product 22	$ 45.2	$ 50.8	$ 46.4	$ 43.5

Select a Range: Sheet7!$B$4:$F$25

Insert In Row:

3. Click on the Insert In icon and select the target row (B27:F27).



Insert Data

Insert Option: row

Source Data: Sheet7!$B$4:$F$25

Insert In:

	A	B	C	D	E	F
2						
3			Q1	Q2	Q3	Q4
4		Product 1	$ 27.0	$ 34.6	$ 48.7	$ 54.8
5		Product 2	$ 43.3	$ 52.5	$ 33.5	$ 30.7
6		Product 3	$ 46.8	$ 23.1	$ 41.8	$ 50.9
7		Product 4	$ 36.9	$ 51.9	$ 50.5	$ 54.5
8		Product 5	$ 23.6	$ 34.0	$ 32.8	$ 50.7
9		Product 6	$ 45.1	$ 35.9	$ 27.7	$ 37.3
10		Product 7	$ 39.0	$ 28.3	$ 25.3	$ 49.0
11		Product 8	$ 33.4	$ 47.7	$ 43.8	$ 40.7
12		Product 9	$ 23.4	$ 24.3	$ 23.3	$ 47.3
13		Product 10	$ 28.9	$ 49.9	$ 40.9	$ 52.1
14		Product 11	$ 53.9	$ 36.3	$ 26.7	$ 51.8
15		Product 12	$ 29.8	$ 31.7	$ 49.8	$ 45.1
16		Product 13	$ 26.3	$ 27.5	$ 45.6	$ 45.8
17		Product 14	$ 38.0	$ 30.2	$ 51.7	$ 50.0
18		Product 15	$ 24.7	$ 24.0	$ 32.8	$ 36.9
19						
20						
21						
22						
23		Product 20	$ 42.6	$ 52.3	$ 33.2	$ 26.7
24		Product 21	$ 37.6	$ 52.5	$ 44.3	$ 29.8
25		Product 22	$ 45.2	$ 50.8	$ 46.4	$ 43.5
26						
27	Insert In Row:					
28						

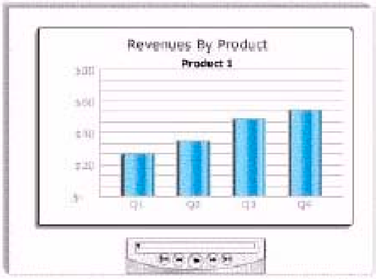
Select a Range

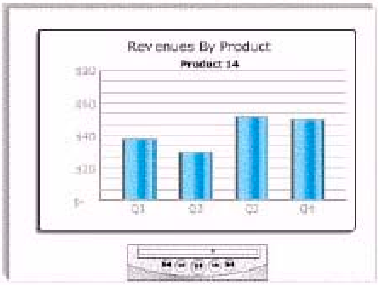
Sheet7!$B$27:$F$27

The Play Selector is now configured with basic functions. As you open the Behavior and Appearance tab, you will find additional features (play time, enable auto rewind, etc.) to enhance your models.

4. The next step is to insert and configure the column chart. The column chart will be linked to the selected Insert in Row. For more details about how to create a chart, see Introduction to Charts.

In the end, your model will look similar to the following:





In this model, the end user can click on the play button and have the Play Selector systematically populate the chart with the net revenues of each of the 20 products. The user can stop the presentation, go back or forward, etc.

Sample Model: Filter

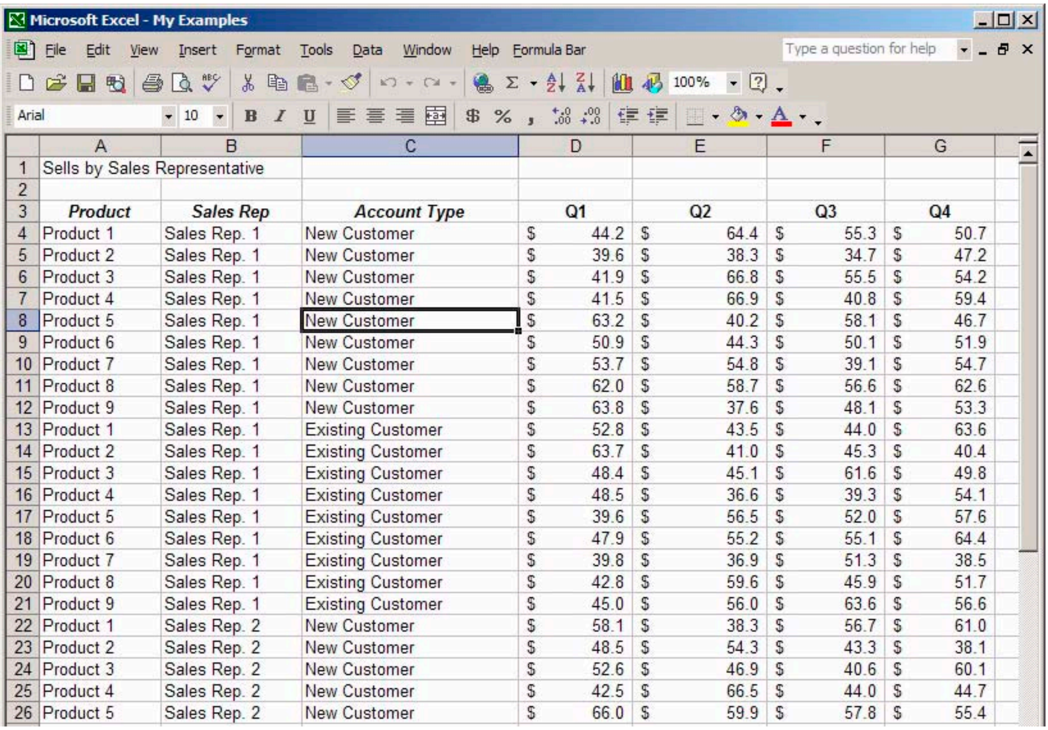
The Filter component is a selector that lets you take a large amount of data organized in rows and present it in a user-friendly way. At the same time, the Filter component lets a user create models with drill down navigation that can use two or more interrelated combo boxes. With Xcelsius, you don't need to worry about programming a complex drill-down functionality. Simply link the filter component to the Excel file and let the tool do its work.

How Does it Work?

The Filter component takes a range of data that shares a common number of items and “filters” the content so that there are no duplicated records. Then, depending on the selection, the filter inserts the corresponding row into a predefined target row.

This target row can be used as source data for any chart. With this combination of features, you can create dazzling models that are both simple to create and rich in content for the final user.

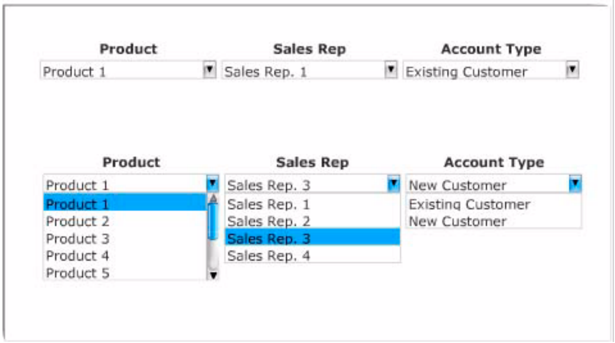
The following picture shows a typical Excel file with a large amount of data:


Microsoft Excel - My Examples
File Edit View Insert Format Tools Data Window Help Formula Bar
Type a question for help
100%
Arial
10

	A	B	C	D	E	F	G
1	Sells by Sales Representative						
2							
3	***Product***	***Sales Rep***	***Account Type***	Q1	Q2	Q3	Q4
4	Product 1	Sales Rep. 1	New Customer	$ 44.2	$ 64.4	$ 55.3	$ 50.7
5	Product 2	Sales Rep. 1	New Customer	$ 39.6	$ 38.3	$ 34.7	$ 47.2
6	Product 3	Sales Rep. 1	New Customer	$ 41.9	$ 66.8	$ 55.5	$ 54.2
7	Product 4	Sales Rep. 1	New Customer	$ 41.5	$ 66.9	$ 40.8	$ 59.4
8	Product 5	Sales Rep. 1	New Customer	$ 63.2	$ 40.2	$ 58.1	$ 46.7
9	Product 6	Sales Rep. 1	New Customer	$ 50.9	$ 44.3	$ 50.1	$ 51.9
10	Product 7	Sales Rep. 1	New Customer	$ 53.7	$ 54.8	$ 39.1	$ 54.7
11	Product 8	Sales Rep. 1	New Customer	$ 62.0	$ 58.7	$ 56.6	$ 62.6
12	Product 9	Sales Rep. 1	New Customer	$ 63.8	$ 37.6	$ 48.1	$ 53.3
13	Product 1	Sales Rep. 1	Existing Customer	$ 52.8	$ 43.5	$ 44.0	$ 63.6
14	Product 2	Sales Rep. 1	Existing Customer	$ 63.7	$ 41.0	$ 45.3	$ 40.4
15	Product 3	Sales Rep. 1	Existing Customer	$ 48.4	$ 45.1	$ 61.6	$ 49.8
16	Product 4	Sales Rep. 1	Existing Customer	$ 48.5	$ 36.6	$ 39.3	$ 54.1
17	Product 5	Sales Rep. 1	Existing Customer	$ 39.6	$ 56.5	$ 52.0	$ 57.6
18	Product 6	Sales Rep. 1	Existing Customer	$ 47.9	$ 55.2	$ 55.1	$ 64.4
19	Product 7	Sales Rep. 1	Existing Customer	$ 39.8	$ 36.9	$ 51.3	$ 38.5
20	Product 8	Sales Rep. 1	Existing Customer	$ 42.8	$ 59.6	$ 45.9	$ 51.7
21	Product 9	Sales Rep. 1	Existing Customer	$ 45.0	$ 56.0	$ 63.6	$ 56.6
22	Product 1	Sales Rep. 2	New Customer	$ 58.1	$ 38.3	$ 56.7	$ 61.0
23	Product 2	Sales Rep. 2	New Customer	$ 48.5	$ 54.3	$ 43.3	$ 38.1
24	Product 3	Sales Rep. 2	New Customer	$ 52.6	$ 46.9	$ 40.6	$ 60.1
25	Product 4	Sales Rep. 2	New Customer	$ 42.5	$ 66.5	$ 44.0	$ 44.7
26	Product 5	Sales Rep. 2	New Customer	$ 66.0	$ 59.9	$ 57.8	$ 55.4

Once the Excel file is imported into Xcelsius, the Filter component will make sure that there are no duplicated records and will present the information in a more user-friendly way.

The first Filter is the default look before any selection has been made; the second filter shows an example of the drill down functionality.

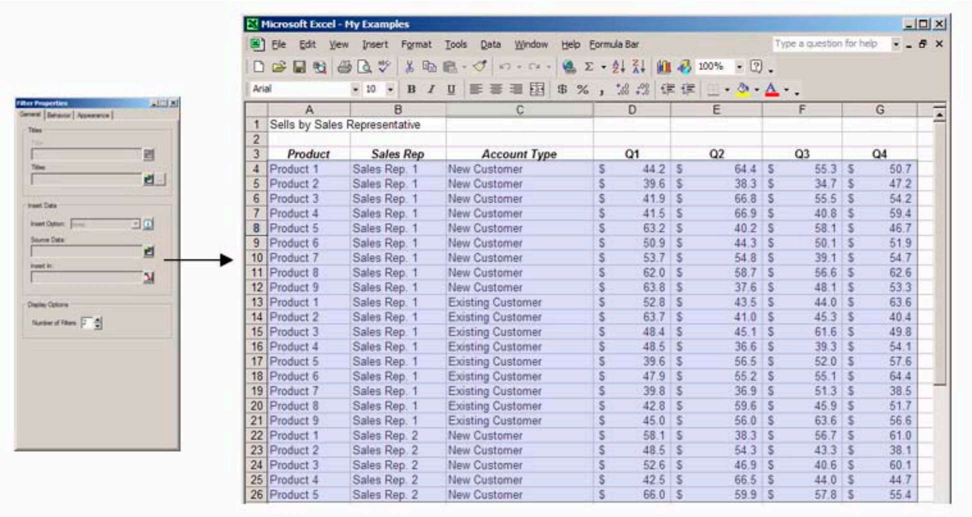


Example

The following example describes how to use the filter component with the Excel file shown above. The file contains Sales per Sales Representative for a group of products. In addition, the data is organized by New Customers and Existing Customers. The Excel file contains a large amount of data that is not easy to analyze.

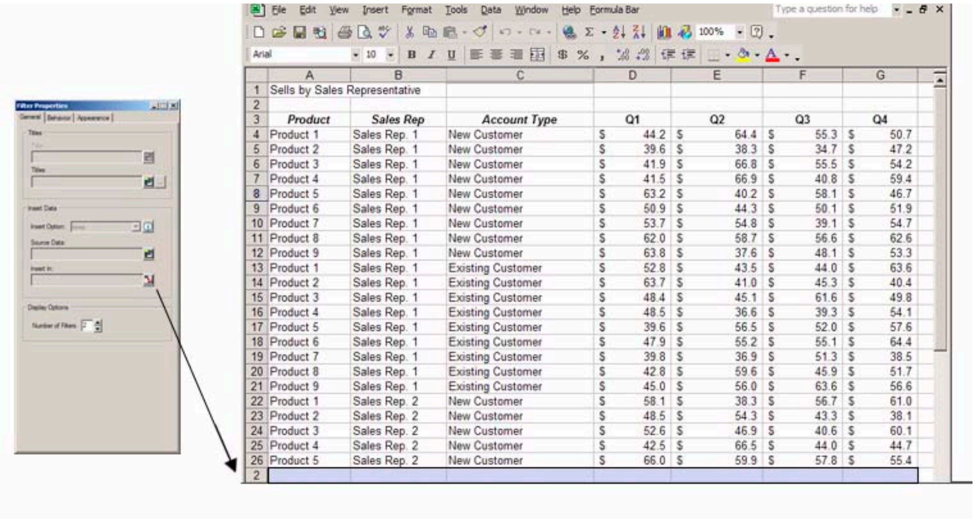
1. After you import the Excel file, insert a Filter Component in the Canvas area.

2. Click on the Source Data icon and select ALL rows and columns to be included in the model. The columns to filter by as well as the columns to be inserted need to be included in the selection.



	A	B	C	D	E	F	G
1	Sells by Sales Representative						
2							
3	*Product*	*Sales Rep*	*Account Type*	Q1	Q2	Q3	Q4
4	Product 1	Sales Rep. 1	New Customer	$ 44.2	$ 64.4	$ 55.3	$ 50.7
5	Product 2	Sales Rep. 1	New Customer	$ 39.6	$ 38.3	$ 34.7	$ 47.2
6	Product 3	Sales Rep. 1	New Customer	$ 41.9	$ 66.8	$ 55.5	$ 54.2
7	Product 4	Sales Rep. 1	New Customer	$ 41.5	$ 66.9	$ 40.8	$ 59.4
8	Product 5	Sales Rep. 1	New Customer	$ 63.2	$ 40.2	$ 58.1	$ 46.7
9	Product 6	Sales Rep. 1	New Customer	$ 50.9	$ 44.3	$ 50.1	$ 51.9
10	Product 7	Sales Rep. 1	New Customer	$ 53.7	$ 54.8	$ 39.1	$ 54.7
11	Product 8	Sales Rep. 1	New Customer	$ 62.0	$ 58.7	$ 56.6	$ 62.6
12	Product 9	Sales Rep. 1	New Customer	$ 63.8	$ 37.6	$ 48.1	$ 53.3
13	Product 1	Sales Rep. 1	Existing Customer	$ 52.8	$ 43.5	$ 44.0	$ 63.6
14	Product 2	Sales Rep. 1	Existing Customer	$ 63.7	$ 41.0	$ 45.3	$ 40.4
15	Product 3	Sales Rep. 1	Existing Customer	$ 48.4	$ 45.1	$ 61.6	$ 49.8
16	Product 4	Sales Rep. 1	Existing Customer	$ 48.5	$ 36.6	$ 39.3	$ 54.1
17	Product 5	Sales Rep. 1	Existing Customer	$ 39.6	$ 56.5	$ 52.0	$ 57.6
18	Product 6	Sales Rep. 1	Existing Customer	$ 47.9	$ 55.2	$ 55.1	$ 64.4
19	Product 7	Sales Rep. 1	Existing Customer	$ 39.8	$ 36.9	$ 51.3	$ 38.5
20	Product 8	Sales Rep. 1	Existing Customer	$ 42.8	$ 59.6	$ 45.9	$ 51.7
21	Product 9	Sales Rep. 1	Existing Customer	$ 45.0	$ 56.0	$ 63.6	$ 56.6
22	Product 1	Sales Rep. 2	New Customer	$ 58.1	$ 38.3	$ 56.7	$ 61.0
23	Product 2	Sales Rep. 2	New Customer	$ 48.5	$ 54.3	$ 43.3	$ 38.1
24	Product 3	Sales Rep. 2	New Customer	$ 52.6	$ 46.9	$ 40.6	$ 60.1
25	Product 4	Sales Rep. 2	New Customer	$ 42.5	$ 66.5	$ 44.0	$ 44.7
26	Product 5	Sales Rep. 2	New Customer	$ 66.0	$ 59.9	$ 57.8	$ 55.4

3. Click on the Insert In icon and select an empty row as the target row where the Filter will insert the selected row of data. In this example we are filtering by the first three columns so we are going to select only the columns for Q1, Q2, Q3 and Q4 as part of our Insert In row. The columns that we are filtering by are NOT included in the Insert In selection.



	A	B	C	D	E	F	G
1	Sells by Sales Representative						
2							
3	***Product***	***Sales Rep***	***Account Type***	**Q1**	**Q2**	**Q3**	**Q4**
4	Product 1	Sales Rep. 1	New Customer	$ 44.2	$ 64.4	$ 55.3	$ 50.7
5	Product 2	Sales Rep. 1	New Customer	$ 39.6	$ 38.3	$ 34.7	$ 47.2
6	Product 3	Sales Rep. 1	New Customer	$ 41.9	$ 66.8	$ 55.5	$ 54.2
7	Product 4	Sales Rep. 1	New Customer	$ 41.5	$ 66.9	$ 40.8	$ 59.4
8	Product 5	Sales Rep. 1	New Customer	$ 63.2	$ 40.2	$ 58.1	$ 46.7
9	Product 6	Sales Rep. 1	New Customer	$ 50.9	$ 44.3	$ 50.1	$ 51.9
10	Product 7	Sales Rep. 1	New Customer	$ 53.7	$ 54.8	$ 39.1	$ 54.7
11	Product 8	Sales Rep. 1	New Customer	$ 62.0	$ 58.7	$ 56.6	$ 62.6
12	Product 9	Sales Rep. 1	New Customer	$ 63.8	$ 37.6	$ 48.1	$ 53.3
13	Product 1	Sales Rep. 1	Existing Customer	$ 52.8	$ 43.5	$ 44.0	$ 63.6
14	Product 2	Sales Rep. 1	Existing Customer	$ 63.7	$ 41.0	$ 45.3	$ 40.4
15	Product 3	Sales Rep. 1	Existing Customer	$ 48.4	$ 45.1	$ 61.6	$ 49.8
16	Product 4	Sales Rep. 1	Existing Customer	$ 48.5	$ 36.6	$ 39.3	$ 54.1
17	Product 5	Sales Rep. 1	Existing Customer	$ 39.6	$ 56.5	$ 52.0	$ 57.6
18	Product 6	Sales Rep. 1	Existing Customer	$ 47.9	$ 55.2	$ 55.1	$ 64.4
19	Product 7	Sales Rep. 1	Existing Customer	$ 39.8	$ 36.9	$ 51.3	$ 38.5
20	Product 8	Sales Rep. 1	Existing Customer	$ 42.8	$ 59.6	$ 45.9	$ 51.7
21	Product 9	Sales Rep. 1	Existing Customer	$ 45.0	$ 56.0	$ 63.6	$ 56.6
22	Product 1	Sales Rep. 2	New Customer	$ 58.1	$ 38.3	$ 56.7	$ 61.0
23	Product 2	Sales Rep. 2	New Customer	$ 48.5	$ 54.3	$ 43.3	$ 38.1
24	Product 3	Sales Rep. 2	New Customer	$ 52.6	$ 46.9	$ 40.6	$ 60.1
25	Product 4	Sales Rep. 2	New Customer	$ 42.5	$ 66.5	$ 44.0	$ 44.7
26	Product 5	Sales Rep. 2	New Customer	$ 66.0	$ 59.9	$ 57.8	$ 55.4
2							

4. The last step for this basic Filter configuration is to define the number of filters that the model will have. By definition, each Combo Box is a filter. In our example, we will have three filters:

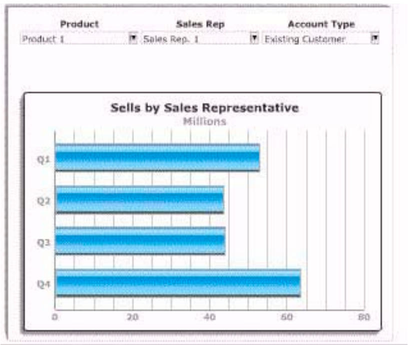
   - Product
   - Sales Representative
   - Account Type

   All the other columns contain the data we want displayed in the chart.

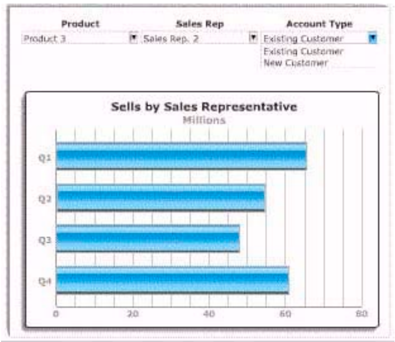
   Add the filter title by clicking on the title icon and enabling titles on the appearance tab. In the Behavior and Appearance tab you will find additional functions to will help you to enhance your models.

   Now that the Filter configuration is completed, add the chart. See page 77 for more information on adding charts.

The final model will look similar to the figure shown below:



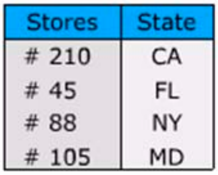
Product: Product 1
Sales Rep: Sales Rep. 1
Account Type: Existing Customer



Product: Product 3
Sales Rep: Sales Rep. 2
Account Type: Existing Customer

Using the Table Component

The Table Selector is a “What-you-see-is-what-you-get” representation of the Excel file, with capabilities that exceed a simple final report. In fact, the Table can be both a picture and a dynamic selector at the same time.



Stores	State
# 210	CA
# 45	FL
# 88	NY
# 105	MD

How Does It Work?

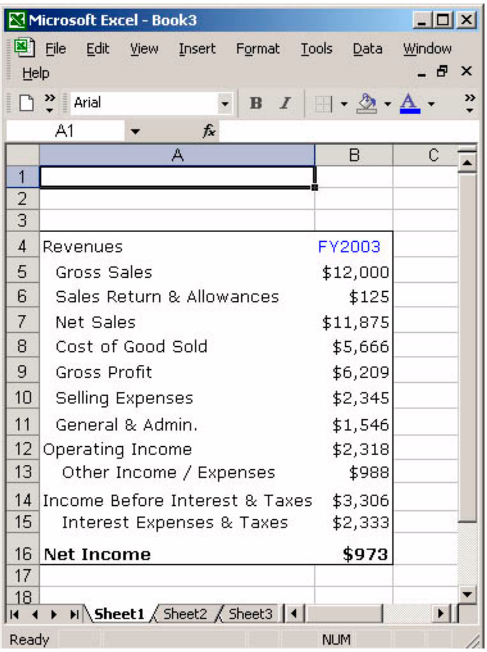
The Table can be used as a

- Display Component (picture)
- Selector

As a Display Component

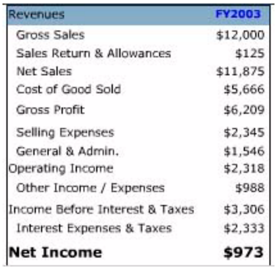
As a Display Component, the Table is a graphic representation of a range of cells in the spreadsheet. Use the Table Display Data Function and select a range of cells from the spreadsheet. The following depicts a typical Excel file.

For this example, the objective is to create an Xcelsius table.



	A	B	C
1			
2			
3			
4	Revenues	FY2003	
5	Gross Sales	$12,000	
6	Sales Return & Allowances	$125	
7	Net Sales	$11,875	
8	Cost of Good Sold	$5,666	
9	Gross Profit	$6,209	
10	Selling Expenses	$2,345	
11	General & Admin.	$1,546	
12	Operating Income	$2,318	
13	Other Income / Expenses	$988	
14	Income Before Interest & Taxes	$3,306	
15	Interest Expenses & Taxes	$2,333	
16	**Net Income**	**$973**	
17			
18			

When you select a range of cells (for example A4:B16), Xcelsius shows the table almost exactly as it appears in the Excel file:



Revenues	FY2003
Gross Sales	$12,000
Sales Return & Allowances	$125
Net Sales	$11,875
Cost of Good Sold	$5,666
Gross Profit	$6,209
Selling Expenses	$2,345
General & Admin.	$1,546
Operating Income	$2,318
Other Income / Expenses	$988
Income Before Interest & Taxes	$3,306
Interest Expenses & Taxes	$2,333
Net Income	**$973**

Note how the Xcelsius table takes the same format that the table or range has in Excel. Some Excel features are not represented exactly as they are in Excel.

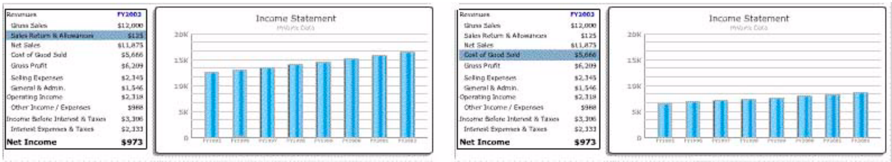
Future versions of Xcelsius will offer full integration. Some of the exceptions include:

- **Font Types:** Verdana Font Type is the only font supported at this time.
- **Alignment Options:** Some alignment options are not yet supported.

As a Selector Component

The Table component can also be used as a Selector. In this case, use the table as a display component, then use the Insert in Row function to insert data row by row in a target row with each table selection. In the above picture, for example, you may want to enable the table so that when you click or pass the pointer over Gross Sales or any other account, the table inserts a row of data into the target row.

With this functionality, you can create astonishing models quickly and easily.



Revenues	FY2003
Gross Sales	$12,000
Sales Return & Allowances	$125
Net Sales	$11,875
Cost of Good Sold	$5,666
Gross Profit	$6,209
Selling Expenses	$2,345
General & Admin.	$1,546
Operating Income	$2,318
Other Income / Expenses	$988
Income Before Interest & Taxes	$3,306
Interest Expenses & Taxes	$2,333
Net Income	**$973**

The table in the model shown above acts as both a Display Component and Selector. Each time you click on any account (for example, Sales and Marketing), the table provides the data to populate the chart. As you click on other accounts, the chart represents the new values.

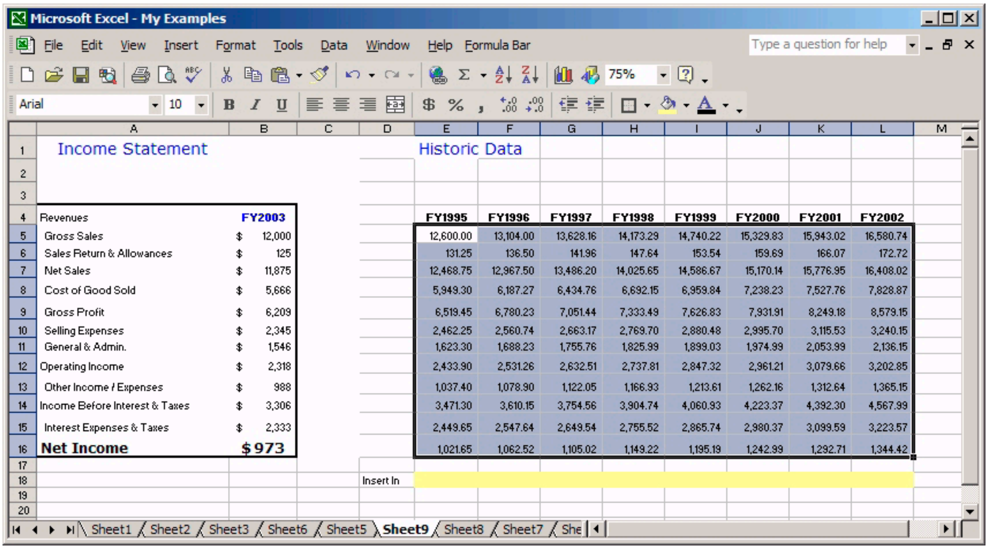
Sample Model: Table

This section describes an example of using the Table component.

Example

Suppose you need to create a model that uses the standard P&L statement of your company. In addition, you want to add real value to the report by using a Table component that acts as a selector by inserting historic data for each account to populate a dynamic chart.

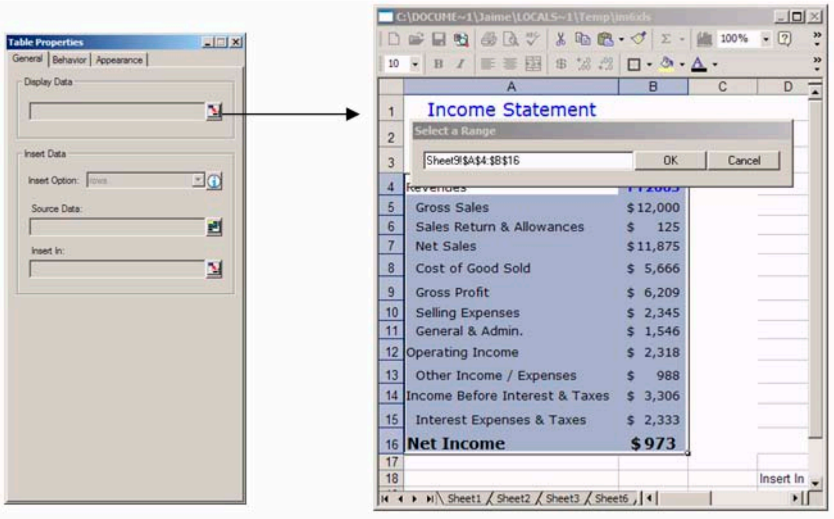
After you import the Excel file and insert a Table component on the Canvas area, select the data that will appear in the table. The following picture shows an example of an appropriate Excel file.



	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Income Statement				Historic Data								
2													
3													
4	Revenues	FY2003			FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	
5	Gross Sales	$ 12,000			12,600.00	13,104.00	13,628.16	14,173.29	14,740.22	15,329.83	15,943.02	16,580.74	
6	Sales Return & Allowances	$ 125			131.25	136.50	141.96	147.64	153.54	159.69	166.07	172.72	
7	Net Sales	$ 11,875			12,468.75	12,967.50	13,486.20	14,025.65	14,586.67	15,170.14	15,776.95	16,408.02	
8	Cost of Good Sold	$ 5,666			5,949.30	6,187.27	6,434.76	6,692.15	6,959.84	7,238.23	7,527.76	7,828.87	
9	Gross Profit	$ 6,209			6,519.45	6,780.23	7,051.44	7,333.49	7,626.83	7,931.91	8,249.18	8,579.15	
10	Selling Expenses	$ 2,345			2,462.25	2,560.74	2,663.17	2,769.70	2,880.48	2,995.70	3,115.53	3,240.15	
11	General & Admin.	$ 1,546			1,623.30	1,688.23	1,755.76	1,825.99	1,899.03	1,974.99	2,053.99	2,136.15	
12	Operating Income	$ 2,318			2,433.90	2,531.26	2,632.51	2,737.81	2,847.32	2,961.21	3,079.66	3,202.85	
13	Other Income / Expenses	$ 988			1,037.40	1,078.90	1,122.05	1,166.93	1,213.61	1,262.16	1,312.64	1,365.15	
14	Income Before Interest & Taxes	$ 3,306			3,471.30	3,610.15	3,754.56	3,904.74	4,060.93	4,223.37	4,392.30	4,567.99	
15	Interest Expenses & Taxes	$ 2,333			2,449.65	2,547.64	2,649.54	2,755.52	2,865.74	2,980.37	3,099.59	3,223.57	
16	**Net Income**	**$ 973**			1,021.65	1,062.52	1,105.02	1,149.22	1,195.19	1,242.99	1,292.71	1,344.42	
17													
18				Insert In									
19													
20													

Cell A4:B16 contains the data to be displayed on the chart. Cells E5:L16 contain the data to be inserted with each selection.

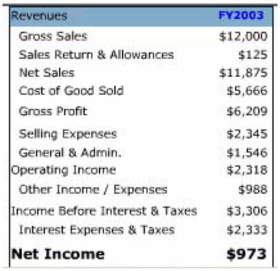
1. Click on the Display Data icon and select the range of cells that will comprise the table.



Sheet9!$A$4:$B$16

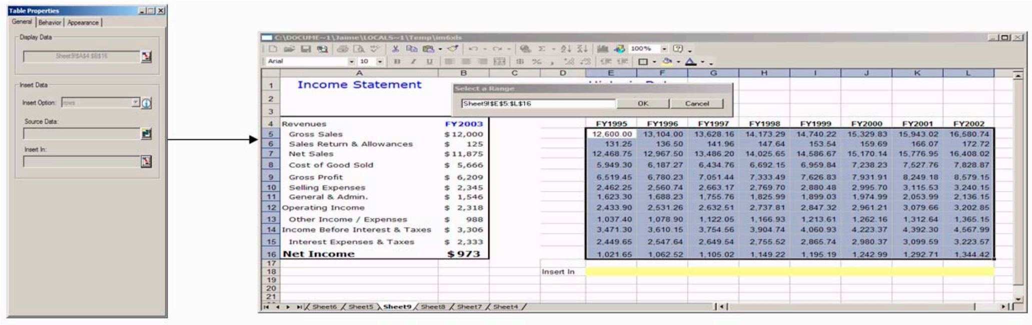
	A	B
1	Income Statement	
4	Revenues	FY2003
5	Gross Sales	$ 12,000
6	Sales Return & Allowances	$ 125
7	Net Sales	$ 11,875
8	Cost of Good Sold	$ 5,666
9	Gross Profit	$ 6,209
10	Selling Expenses	$ 2,345
11	General & Admin.	$ 1,546
12	Operating Income	$ 2,318
13	Other Income / Expenses	$ 988
14	Income Before Interest & Taxes	$ 3,306
15	Interest Expenses & Taxes	$ 2,333
16	**Net Income**	**$ 973**

The table is an exact replica of the Excel file. Good news: Your users won't miss those paper reports! The table will look like the following:



Revenues	FY2003
Gross Sales	$12,000
Sales Return & Allowances	$125
Net Sales	$11,875
Cost of Good Sold	$5,666
Gross Profit	$6,209
Selling Expenses	$2,345
General & Admin.	$1,546
Operating Income	$2,318
Other Income / Expenses	$988
Income Before Interest & Taxes	$3,306
Interest Expenses & Taxes	$2,333
Net Income	**$973**

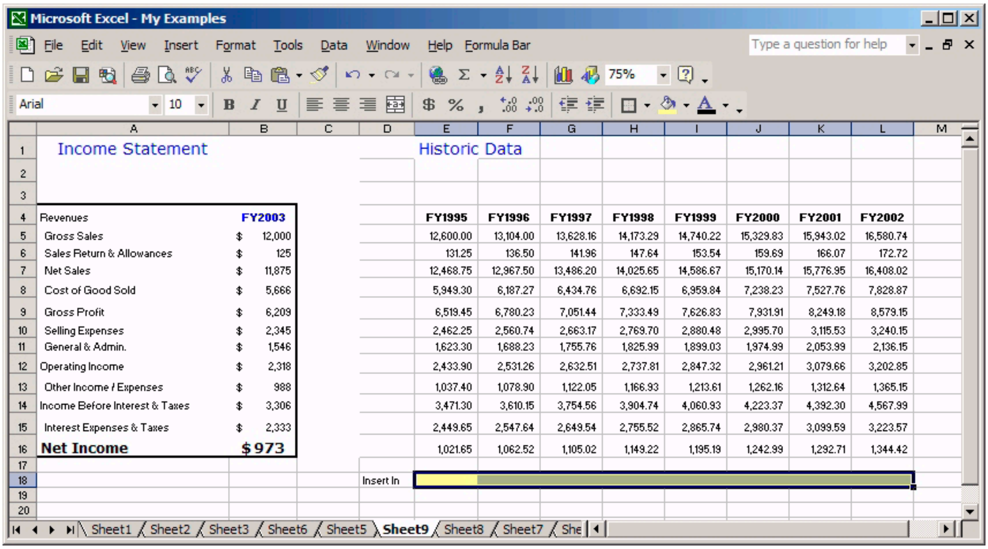
2. Use the table as a Selector by clicking on the Source Data icon and selecting the data that you want displayed on the chart.



Display Data: Sheet9!$A$4:$B$16

Select a Range: Sheet9!$E$5:$L$16

3. Click the Insert In icon and select the row where you want the data to be inserted. This row is used to populate the chart.

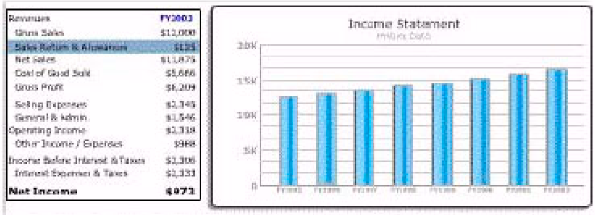


	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Income Statement				Historic Data								
2													
3													
4	Revenues	FY2003			FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	
5	Gross Sales	$ 12,000			12,600.00	13,104.00	13,628.16	14,173.29	14,740.22	15,329.83	15,943.02	16,580.74	
6	Sales Return & Allowances	$ 125			131.25	136.50	141.96	147.64	153.54	159.69	166.07	172.72	
7	Net Sales	$ 11,875			12,468.75	12,967.50	13,486.20	14,025.65	14,586.67	15,170.14	15,776.95	16,408.02	
8	Cost of Good Sold	$ 5,666			5,949.30	6,187.27	6,434.76	6,692.15	6,959.84	7,238.23	7,527.76	7,828.87	
9	Gross Profit	$ 6,209			6,519.45	6,780.23	7,051.44	7,333.49	7,626.83	7,931.91	8,249.18	8,579.15	
10	Selling Expenses	$ 2,345			2,462.25	2,560.74	2,663.17	2,769.70	2,880.48	2,995.70	3,115.53	3,240.15	
11	General & Admin.	$ 1,546			1,623.30	1,688.23	1,755.76	1,825.99	1,899.03	1,974.99	2,053.99	2,136.15	
12	Operating Income	$ 2,318			2,433.90	2,531.26	2,632.51	2,737.81	2,847.32	2,961.21	3,079.66	3,202.85	
13	Other Income / Expenses	$ 988			1,037.40	1,078.90	1,122.05	1,166.93	1,213.61	1,262.16	1,312.64	1,365.15	
14	Income Before Interest & Taxes	$ 3,306			3,471.30	3,610.15	3,754.56	3,904.74	4,060.93	4,223.37	4,392.30	4,567.99	
15	Interest Expenses & Taxes	$ 2,333			2,449.65	2,547.64	2,649.54	2,755.52	2,865.74	2,980.37	3,099.59	3,223.57	
16	**Net Income**	**$973**			1,021.65	1,062.52	1,105.02	1,149.22	1,195.19	1,242.99	1,292.71	1,344.42	
17													
18				Insert In									
19													
20													

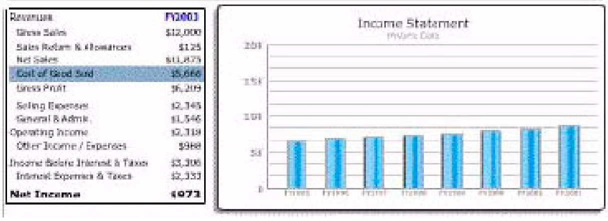
The chart has been configured.

4. The next step is to insert a chart linked to the range E18:L18. See page 77 for more information on adding charts.

After the chart has been configured, your model will resemble the following:



Revenues	FY2003
Gross Sales	$12,000
Sales Return & Allowances	$125
Net Sales	$11,875
Cost of Good Sold	$5,666
Gross Profit	$6,209
Selling Expenses	$2,345
General & Admin	$1,546
Operating Income	$2,318
Other Income / Expenses	$988
Income Before Interest & Taxes	$3,306
Interest Expenses & Taxes	$2,333
Net Income	**$973**



Revenues	FY2003
Gross Sales	$12,000
Sales Return & Allowances	$125
Net Sales	$11,875
Cost of Good Sold	$5,666
Gross Profit	$6,209
Selling Expenses	$2,345
General & Admin.	$1,546
Operating Income	$2,318
Other Income / Expenses	$988
Income Before Interest & Taxes	$3,306
Interest Expenses & Taxes	$2,333
Net Income	**$973**

When you click on each account displayed on the table, the table updates the chart with the account historic data.

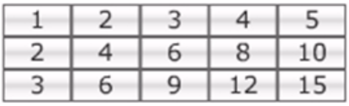
Additional Table Functions

The Behavior and Appearance tabs have additional functions for enhancing and enriching your models. For example, you can enable the table to work as a Selector with mouse click or mouse over, enable or disable some table rows to be part of the selector functionality, or enable or disable grid lines.

Using the Grid Component

In some models, you might need to complement the graphical display of data with traditional tables that show the underlying data. One of the simplest ways to do this is by using a Value component. However, if you need to create an array of several values components, using individual Value components is not the most efficient way.

For these cases, we recommend you use the Grid component. The Grid component is a collection of N number of values components that are linked together so that they respond to global functions. For example, if you use the Grid component and need to change the font size, the same font size will be applied to all cells or values that comprise the Grid.



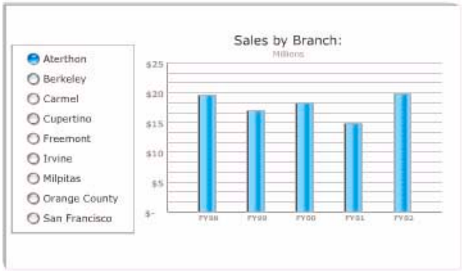
1	2	3	4	5
2	4	6	8	10
3	6	9	12	15

The Grid component works the same as the Value component. See page 68 for details on how to create a model using the Value component.

You can use the Grid component as an input or output component. This means you can modify the underlying data by placing the pointer over each one of the array values that comprise the Grid.

Sample Model: Grid

Suppose you already have a simple model that shows the Sales by Branch. This model is similar to the one created in the List Box Sample chapter.

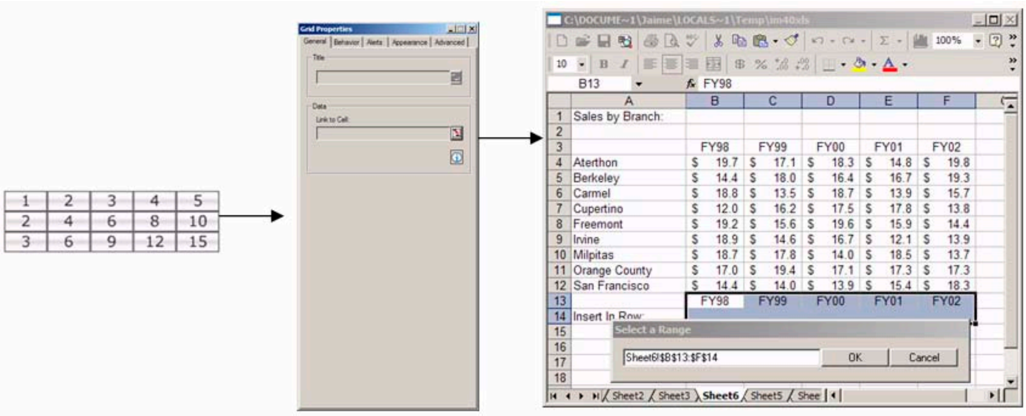


The objective is to complement the above model by placing a Grid chart that displays the data that underlies the chart. In this example, we will use exactly the same range of cells that populates the chart, resulting in a model that contains both graphical (chart) and punctual (grid) information about the sales by branch.

1. Insert a grid component on the canvas area.

2. Click on the Grid to edit the Property Sheet.

3. Link the Grid to the source data. In this case, we select two rows: one with the year name and the other with the actual values.



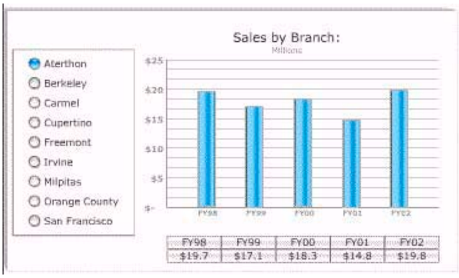
1	2	3	4	5
2	4	6	8	10
3	6	9	12	15

	A	B	C	D	E	F
1	Sales by Branch:					
2						
3		FY98	FY99	FY00	FY01	FY02
4	Aterthon	$ 19.7	$ 17.1	$ 18.3	$ 14.8	$ 19.8
5	Berkeley	$ 14.4	$ 18.0	$ 16.4	$ 16.7	$ 19.3
6	Carmel	$ 18.8	$ 13.5	$ 18.7	$ 13.9	$ 15.7
7	Cupertino	$ 12.0	$ 16.2	$ 17.5	$ 17.8	$ 13.8
8	Freemont	$ 19.2	$ 15.6	$ 19.6	$ 15.9	$ 14.4
9	Irvine	$ 18.9	$ 14.6	$ 16.7	$ 12.1	$ 13.9
10	Milpitas	$ 18.7	$ 17.8	$ 14.0	$ 18.5	$ 13.7
11	Orange County	$ 17.0	$ 19.4	$ 17.1	$ 17.3	$ 17.3
12	San Francisco	$ 14.4	$ 14.0	$ 13.9	$ 15.4	$ 18.3
13		FY98	FY99	FY00	FY01	FY02
14	Insert In Row:					

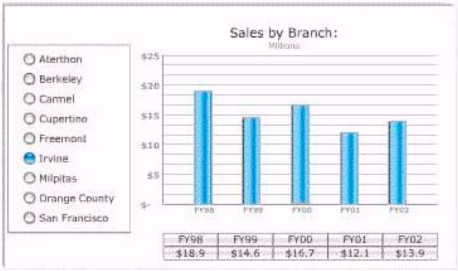
Select a Range

Sheet6!$B$13:$F$14

With this simple action, the Grid component has been configured. Now you can apply final touches, such as adjusting the size, fonts, and vertical and horizontal spacing. Afterwards, your model will resemble the following:



FY98	FY99	FY00	FY01	FY02
$19.7	$17.1	$18.3	$14.8	$19.8



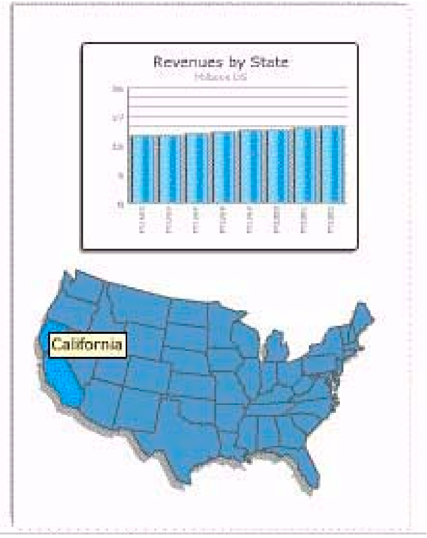
FY98	FY99	FY00	FY01	FY02
$18.9	$14.6	$16.7	$12.1	$13.9

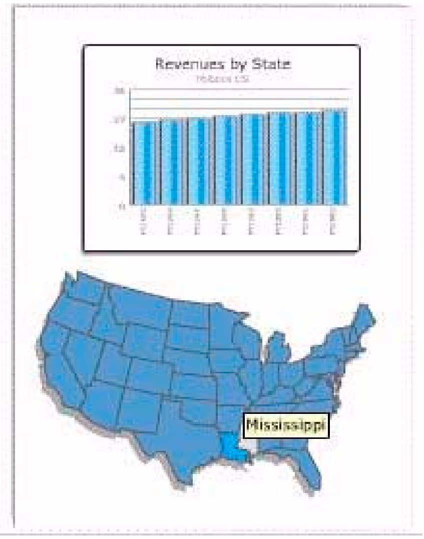
Users will have both the graphical and punctual information in the same model. As they select each branch, both the chart and the grid will display the corresponding data.

Using the Map Component

The USA and Europe maps are a special component for creating models with geographical representations that can be displayed by region.

The map has two major characteristics. It shows data for each region; each region can act as a Selector at the same time. By combining these two features, you can create a model that, for example, displays the total sales by region, where the data for each region appears when you pass the pointer over the region. At the same time, each region can insert a row of data that contains additional information, such as the historic sales trend. This row of data is used to populate other components, such as a chart or a set of single value components.

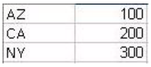




How Does It Work?

Xcelsius makes it easy to associate data with each region in the map by using Region Codes. Each region in the map has a defined Region Code. When Source Data, Display Data, or Target Data is selected, the map component searches either the first column or first row of the range for the defined codes. When a code is found, the data in the matching row or column is then associated with the corresponding region.

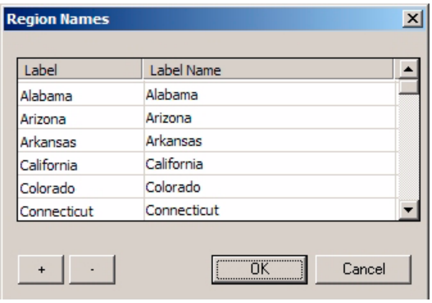
For example, using the Postal abbreviations for codes in the USA map, the following Display Data:



AZ	100
CA	200
NY	300

would associate the value 100 with Arizona, 200 with California, and 300 with New York.

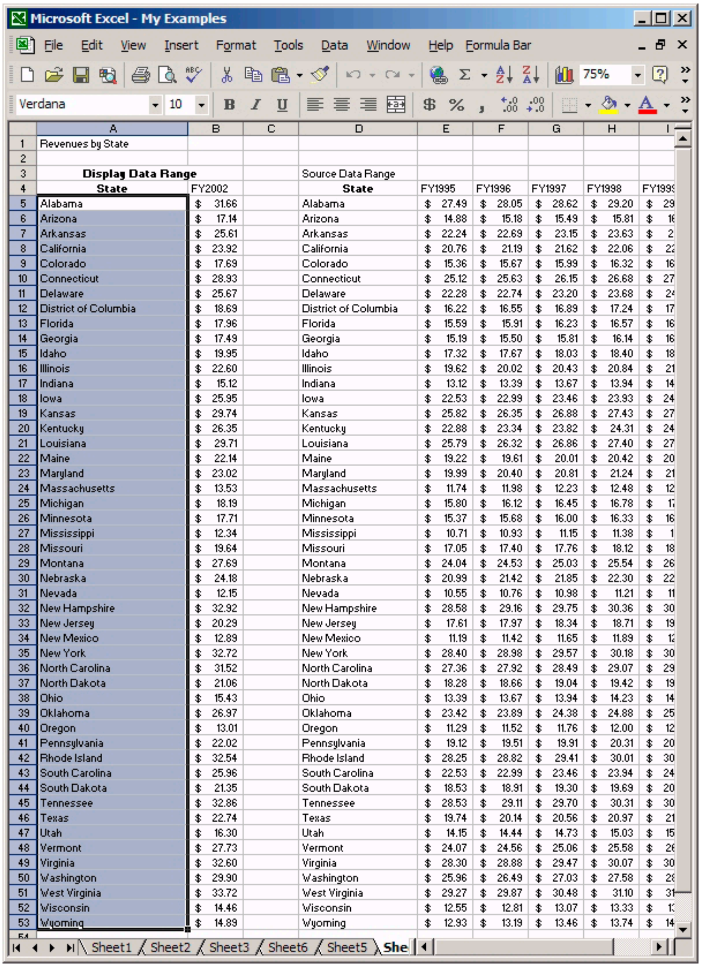
By default, the USA map uses the Postal abbreviations as its Region Codes, and the Europe Map uses the ISO (International Organization for Standardization) 2-digit country codes for its Region Codes. In order to make it easy to use the map components with existing spreadsheets, you can, however, easily edit the Region Codes associated with each region by editing the Region Names. In the following picture, for example, we use the full state name as the Region Code:



Label	Label Name
Alabama	Alabama
Arizona	Arizona
Arkansas	Arkansas
California	California
Colorado	Colorado
Connecticut	Connecticut

To help you create models that take advantage of these powerful components, we've also included the list of default Region Names for both the USA and Europe maps. You can copy and paste these lists into your Excel spreadsheets to use as templates for associating data with the map regions.

The USA and Europe Map follow the same simple methodologies as all other components. You identify the Display Data, the Source Data, and the Insert In range.


Microsoft Excel - My Examples
File Edit View Insert Format Tools Data Window Help Formula Bar
75%
Verdana
10
Sheet1
Sheet2
Sheet3
Sheet6
Sheet5
She

	A	B	C	D	E	F	G	H	I
1	Revenues by State								
2									
3	**Display Data Range**			Source Data Range					
4	**State**	FY2002		**State**	FY1995	FY1996	FY1997	FY1998	FY199
5	Alabama	$ 31.66		Alabama	$ 27.49	$ 28.05	$ 28.62	$ 29.20	$ 29
6	Arizona	$ 17.14		Arizona	$ 14.88	$ 15.18	$ 15.49	$ 15.81	$ 1
7	Arkansas	$ 25.61		Arkansas	$ 22.24	$ 22.69	$ 23.15	$ 23.63	$ 2
8	California	$ 23.92		California	$ 20.76	$ 21.19	$ 21.62	$ 22.06	$ 2
9	Colorado	$ 17.69		Colorado	$ 15.36	$ 15.67	$ 15.99	$ 16.32	$ 16
10	Connecticut	$ 28.93		Connecticut	$ 25.12	$ 25.63	$ 26.15	$ 26.68	$ 27
11	Delaware	$ 25.67		Delaware	$ 22.28	$ 22.74	$ 23.20	$ 23.68	$ 2
12	District of Columbia	$ 18.69		District of Columbia	$ 16.22	$ 16.55	$ 16.89	$ 17.24	$ 17
13	Florida	$ 17.96		Florida	$ 15.59	$ 15.91	$ 16.23	$ 16.57	$ 16
14	Georgia	$ 17.49		Georgia	$ 15.19	$ 15.50	$ 15.81	$ 16.14	$ 16
15	Idaho	$ 19.95		Idaho	$ 17.32	$ 17.67	$ 18.03	$ 18.40	$ 18
16	Illinois	$ 22.60		Illinois	$ 19.62	$ 20.02	$ 20.43	$ 20.84	$ 21
17	Indiana	$ 15.12		Indiana	$ 13.12	$ 13.39	$ 13.67	$ 13.94	$ 14
18	Iowa	$ 25.95		Iowa	$ 22.53	$ 22.99	$ 23.46	$ 23.93	$ 24
19	Kansas	$ 29.74		Kansas	$ 25.82	$ 26.35	$ 26.88	$ 27.43	$ 27
20	Kentucky	$ 26.35		Kentucky	$ 22.88	$ 23.34	$ 23.82	$ 24.31	$ 24
21	Louisiana	$ 29.71		Louisiana	$ 25.79	$ 26.32	$ 26.86	$ 27.40	$ 27
22	Maine	$ 22.14		Maine	$ 19.22	$ 19.61	$ 20.01	$ 20.42	$ 20
23	Maryland	$ 23.02		Maryland	$ 19.99	$ 20.40	$ 20.81	$ 21.24	$ 21
24	Massachusetts	$ 13.53		Massachusetts	$ 11.74	$ 11.98	$ 12.23	$ 12.48	$ 12
25	Michigan	$ 18.19		Michigan	$ 15.80	$ 16.12	$ 16.45	$ 16.78	$ 1
26	Minnesota	$ 17.71		Minnesota	$ 15.37	$ 15.68	$ 16.00	$ 16.33	$ 16
27	Mississippi	$ 12.34		Mississippi	$ 10.71	$ 10.93	$ 11.15	$ 11.38	$ 1
28	Missouri	$ 19.64		Missouri	$ 17.05	$ 17.40	$ 17.76	$ 18.12	$ 18
29	Montana	$ 27.69		Montana	$ 24.04	$ 24.53	$ 25.03	$ 25.54	$ 26
30	Nebraska	$ 24.18		Nebraska	$ 20.99	$ 21.42	$ 21.85	$ 22.30	$ 22
31	Nevada	$ 12.15		Nevada	$ 10.55	$ 10.76	$ 10.98	$ 11.21	$ 11
32	New Hampshire	$ 32.92		New Hampshire	$ 28.58	$ 29.16	$ 29.75	$ 30.36	$ 30
33	New Jersey	$ 20.29		New Jersey	$ 17.61	$ 17.97	$ 18.34	$ 18.71	$ 19
34	New Mexico	$ 12.89		New Mexico	$ 11.19	$ 11.42	$ 11.65	$ 11.89	$ 1
35	New York	$ 32.72		New York	$ 28.40	$ 28.98	$ 29.57	$ 30.18	$ 30
36	North Carolina	$ 31.52		North Carolina	$ 27.36	$ 27.92	$ 28.49	$ 29.07	$ 29
37	North Dakota	$ 21.06		North Dakota	$ 18.28	$ 18.66	$ 19.04	$ 19.42	$ 19
38	Ohio	$ 15.43		Ohio	$ 13.39	$ 13.67	$ 13.94	$ 14.23	$ 14
39	Oklahoma	$ 26.97		Oklahoma	$ 23.42	$ 23.89	$ 24.38	$ 24.88	$ 25
40	Oregon	$ 13.01		Oregon	$ 11.29	$ 11.52	$ 11.76	$ 12.00	$ 12
41	Pennsylvania	$ 22.02		Pennsylvania	$ 19.12	$ 19.51	$ 19.91	$ 20.31	$ 20
42	Rhode Island	$ 32.54		Rhode Island	$ 28.25	$ 28.82	$ 29.41	$ 30.01	$ 30
43	South Carolina	$ 25.96		South Carolina	$ 22.53	$ 22.99	$ 23.46	$ 23.94	$ 24
44	South Dakota	$ 21.35		South Dakota	$ 18.53	$ 18.91	$ 19.30	$ 19.69	$ 20
45	Tennessee	$ 32.86		Tennessee	$ 28.53	$ 29.11	$ 29.70	$ 30.31	$ 30
46	Texas	$ 22.74		Texas	$ 19.74	$ 20.14	$ 20.56	$ 20.97	$ 21
47	Utah	$ 16.30		Utah	$ 14.15	$ 14.44	$ 14.73	$ 15.03	$ 15
48	Vermont	$ 27.73		Vermont	$ 24.07	$ 24.56	$ 25.06	$ 25.58	$ 2
49	Virginia	$ 32.60		Virginia	$ 28.30	$ 28.88	$ 29.47	$ 30.07	$ 30
50	Washington	$ 29.90		Washington	$ 25.96	$ 26.49	$ 27.03	$ 27.58	$ 2
51	West Virginia	$ 33.72		West Virginia	$ 29.27	$ 29.87	$ 30.48	$ 31.10	$ 31
52	Wisconsin	$ 14.46		Wisconsin	$ 12.55	$ 12.81	$ 13.07	$ 13.33	$ 1
53	Wyoming	$ 14.89		Wyoming	$ 12.93	$ 13.19	$ 13.46	$ 13.74	$ 14

Note. In the Excel file you must identify the State code and data in a contiguous range of cells for each selection that you make: Display Data, Source Data, and Inset In Range.

Sample Model: Map

This section provides an example of how to create a model using the USA Map component.

Example

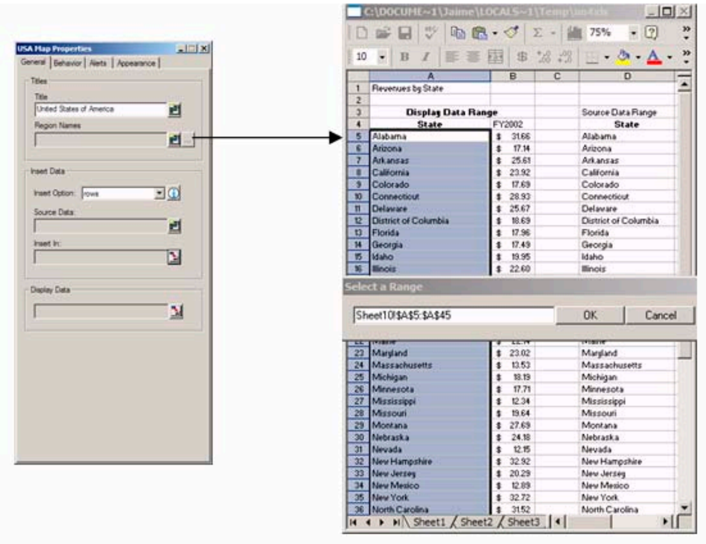
Suppose you want to create a model that shows the revenues by state for a retail company. You want the model to be dynamic so that when a user clicks or passes the pointer over a State, the State inserts a row of data that populates a column chart showing the historic revenue trend.

After the Excel file has been imported and you insert a map on the canvas area, you define the State codes.

1. To do this, click on the USA Map to display the Property Sheet. Then click on the Region Names Icon.

   By default, the USA Map has the list of the 48 continental States plus Washington D.C. in alphabetical order. Before using the Map, you must indicate the codes to which each state is going to be identified on the Excel file. For example, you can choose AL for Alabama, CA for California, etc. With this operation, the USA MAP identifies the data corresponding to a cell that contains the code as being the data for Alabama, CA as being the data for California, and so on.

   In the following picture we used the same State name as the State Code.



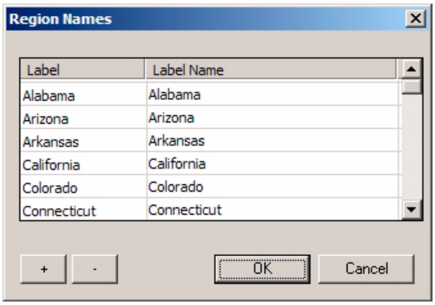
Title: United States of America

Insert Option: rows

Sheet10!$A$5:$A$45

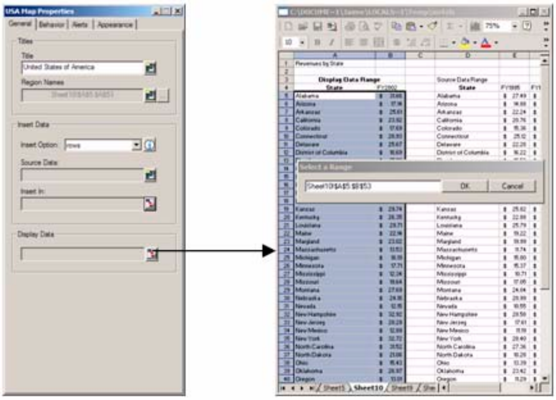
	A	B	C	D
1	Revenues by State			
2				
3	**Display Data Range**			Source Data Range
4	**State**	FY2002		**State**
5	Alabama	$ 31.66		Alabama
6	Arizona	$ 17.14		Arizona
7	Arkansas	$ 25.61		Arkansas
8	California	$ 23.92		California
9	Colorado	$ 17.69		Colorado
10	Connecticut	$ 28.93		Connecticut
11	Delaware	$ 25.67		Delaware
12	District of Columbia	$ 18.69		District of Columbia
13	Florida	$ 17.96		Florida
14	Georgia	$ 17.49		Georgia
15	Idaho	$ 19.95		Idaho
16	Illinois	$ 22.60		Illinois
23	Maryland	$ 23.02		Maryland
24	Massachusetts	$ 13.53		Massachusetts
25	Michigan	$ 18.19		Michigan
26	Minnesota	$ 17.71		Minnesota
27	Mississippi	$ 12.34		Mississippi
28	Missouri	$ 19.64		Missouri
29	Montana	$ 27.69		Montana
30	Nebraska	$ 24.18		Nebraska
31	Nevada	$ 12.15		Nevada
32	New Hampshire	$ 32.92		New Hampshire
33	New Jersey	$ 20.29		New Jersey
34	New Mexico	$ 12.89		New Mexico
35	New York	$ 32.72		New York
36	North Carolina	$ 31.52		North Carolina

2. You can validate that each State is linked to the correct State code by clicking on the browse button (shown in the margin) in the Region Names Area.

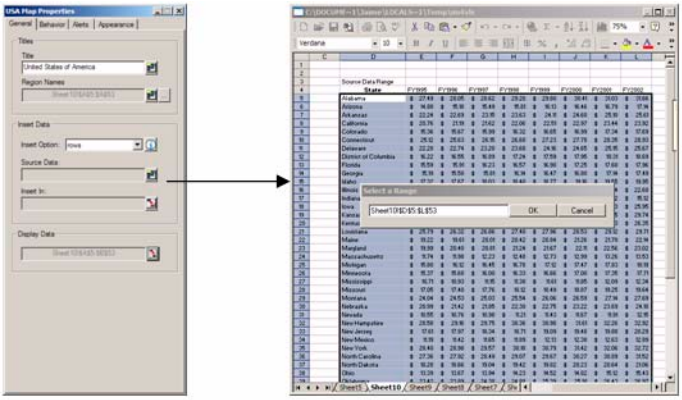


Label	Label Name
Alabama	Alabama
Arizona	Arizona
Arkansas	Arkansas
California	California
Colorado	Colorado
Connecticut	Connecticut

3. Select the States and data displayed on the USA Map by clicking the Display Data icon and selecting the State Code and the data.



4. Configure the USA Map so that when you click on each State, the selected State acts as a Selector. Click the Source Data icon and select the State Code and the data.

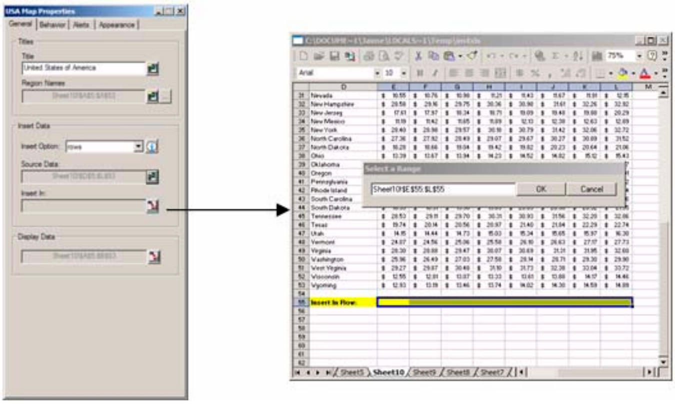


Title: United States of America

Insert Option: rows

Select a Range: Sheet10!$D$5:$L$53

5. Define the range where the selected row will be inserted. Click the Insert In icon and select an empty range.



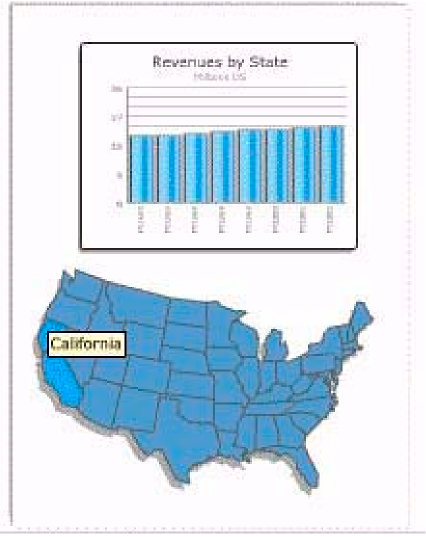
Title: United States of America

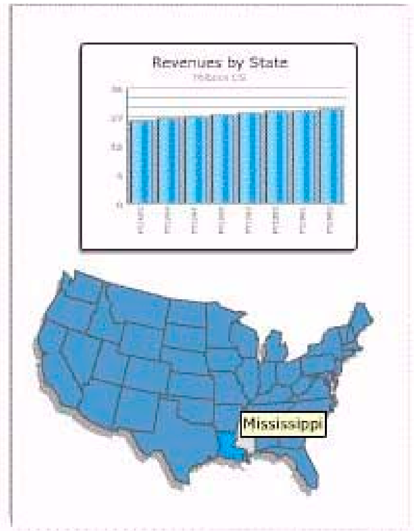
Insert Option: rows

Select a Range: Sheet10!$E$55:$L$55

The USA Map has been configured. The final step in creating this model is to insert and configure the column chart. If the Data Range of the chart is tied to the same cells as the Insert In range of the Map, the Chart will display the data of whichever State is selected on the map. See page 77 for more information on adding charts.

Once the chart is created, the model is ready to be compiled and published. It will resemble the following:

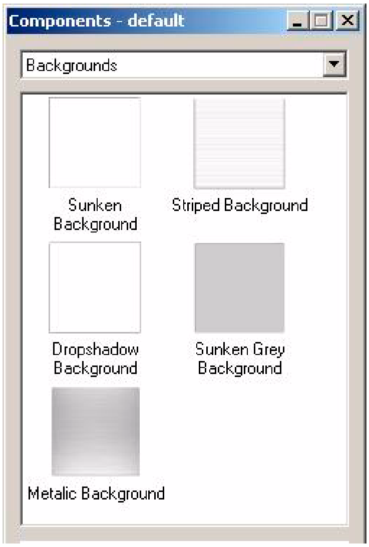




Using Backgrounds Components

Backgrounds provide a number of ways to help customize your models. You can use them as-is to quickly add engaging background visuals to your model. They can also be used to import **external images** (JPGs) or **Flash Movies** (SWFs). There are also a number of different parameters you can adjust that allow you to create your own custom backgrounds. This section describes the basic functionality of Backgrounds.

A number of different backgrounds are included with Xcelsius to help you create visually stimulating models quickly and easily. The distinct look of each of these is described below, but you can use any background to import images or Flash movies.

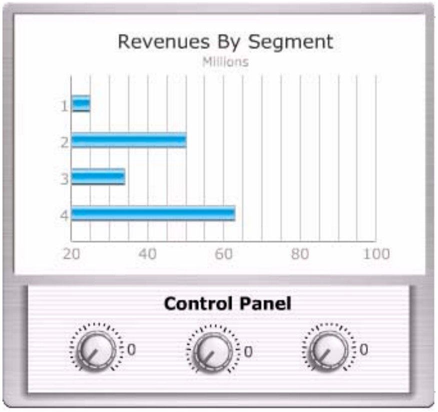


- **Striped Background**
  An elegant background can be used alone or combined with any embedded JPG or SWF file.
- **Sunken Background**
  An elegant and transparent background can be used alone or combined with any JPG or SWF file. The Sunken Background is ideal for developing clean and executive models without the complexity of working with too many colors.

- **Metallic Background**
  The Metallic Background provides a high-tech look for your models. Elegant and sophisticated, it can be used alone or combined with any embedded JPG or SWF file.
- **Sunken Grey Background**
  The Sunken Grey Background provides the user with a neutral grey tone and soft edges, which can be used perfectly in combination with the metal background. The look and feel achieved through this background component provides a solid ground for light and dark colors.
- **Dropshadow Background**
  The Dropshadow Background provides the same look and feel as the default chart backgrounds, allowing the user to continue the same aesthetic or even create something entirely new. This background is perfect on a blank canvas, providing a visual footing for any information being displayed.

Backgrounds Functionality

The following is an example of a simple model created using backgrounds. In this case, we use three backgrounds to create the look:



External Images or Flash Movies

Any background can be used to display JPG images which allows you to add your own logos or artwork into an Xcelsius model easily.

You can also add **video**, **animations**, and other **interactive elements** by importing a Flash movie.

Since exported Xcelsius models are themselves Flash movies, you can use this feature to add an exported Xcelsius model into another Xcelsius model. This allows you to piece together your models to develop complex dashboards.

Embedding External Files

When importing external files into the background components, you will have the choice of whether to embed the file or not.

If you choose to embed the file, it will become a part of the SWF file that is created when the model is exported.

If you choose **not** to embed the file, at runtime the file will be loaded into the exported model as needed. When the model is exported, all of the **non-embedded** external files used in the model are written out to a folder with the same name and location as the exported model. The model will load the external images or movies from this directory. The model and folder **must** exist in the same directory for the external files to be loaded correctly.

The decision on whether to embed the file or not will depend on your specific needs. The main advantages for embedding files are outlined below:

- Allows you to distribute your entire model in a single file
- Dynamic Visibility is faster since reload doesn't occur
- Maintains state when hidden with Dynamic Visibility

The main advantages for **not** embedding files are outlined below:

- Possible runtime performance increases since the external files are unloaded when they are hidden with Dynamic Visibility
- Shorter load time for application since external files are loaded only when necessary

- Model does not need to be re-exported if external file changes

Nested External Files

Xcelsius allows you to use external SWF files in your models. These SWF files may, in turn, have external assets such as other SWF files, images, or XML files. The external assets used by the SWF that are referenced with **relative** paths must be available from the **location of the host model**.

For example, if you have a SWF file which loads in an external image at “images/myImage.jpg”, and you use this SWF file within your model, the SWF file will attempt to load an image at “images/myImage.jpg” from the location of the **model**. It does **not** load relative to the external SWF file.

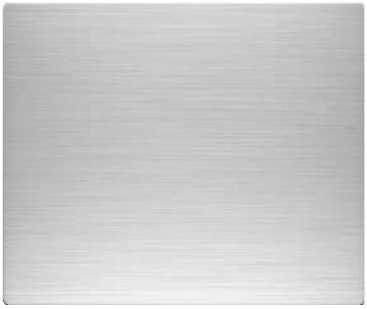
Sample Model: Background

This section provides an example of how to use backgrounds with embedded JPG or SWF files.

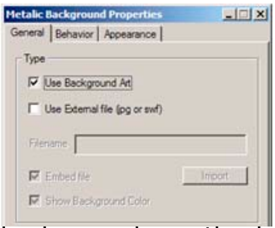
Example

Suppose you need to create a model that has a world map as a background so that you can place other components on top of it.

1. Insert any background on the canvas area. We select the Metallic Background.



2. Click the Background to edit the Property Sheet.



Type

☑ Use Background Art

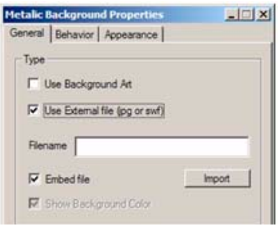
☐ Use External file (jpg or swf)

Filename

☑ Embed file

☑ Show Background Color

3. By default, the backgrounds use the defined Xcelsius Art. Check Use External File (JPG or SWF) to use the embedded functionality.



Type

☐ Use Background Art

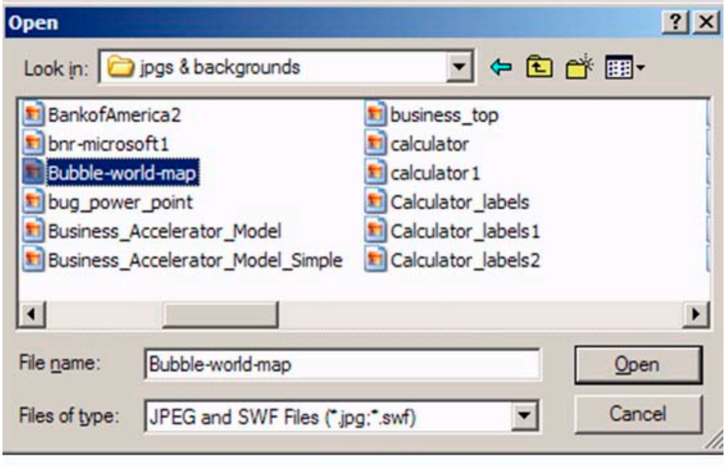
☑ Use External file (jpg or swf)

Filename

☑ Embed file

☑ Show Background Color

4. Click the Import file option. Then browse and select the desired JPG or SWF file.



Look in: jpgs & backgrounds

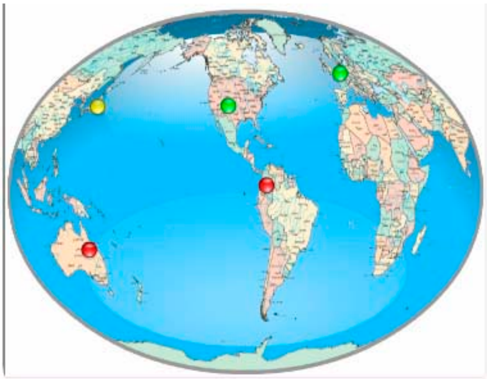
BankofAmerica2	business_top
bnr-microsoft1	calculator
Bubble-world-map	calculator1
bug_power_point	Calculator_labels
Business_Accelerator_Model	Calculator_labels1
Business_Accelerator_Model_Simple	Calculator_labels2

File name: Bubble-world-map

Files of type: JPEG and SWF Files (*.jpg;*.swf)

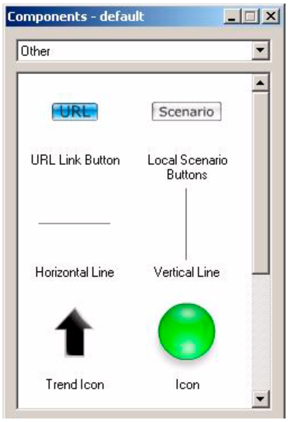
5. Select the file, then click Open. Your background is now ready. You can now add other components, including a background, on top of it.

In this case, we inserted some Icons on top of each region to represent the overall financial performance:



Using Other Components

This section contains a set of components that you can use to enhance your models.



- **Trend Icon**
  The trend Icon changes its pointing direction, depending on the value of the cell to which it is linked:
  - If the value is positive, the arrow points up.
  - If the value is zero, the arrow is neutral.
  - If the value is negative, the arrow points down.

- **Icon**
  The Icon is one of the most simple and at the same time most functional components. The Icon can be used as a mobile selector or object. It can represent the value contained in one cell and be compared to its target or budget value.

  The Icon changes color depending on its value. See “Introduction to Dynamic Visibility Functionality” on page 150 for more information.

  At the same time, you can use the Icon to activate and display other components. See “Introduction to Dynamic Visibility Functionality” on page 150 for more information.

- **Line**
  A simple vertical or horizontal line can enhance your models.
- **Label**
  The label component lets you add an unlimited amount of text to enhance your models. You can use the Label component to create titles, subtitles, explanations, help, and so on.
- **URL Link Button**
  A simple button that links to a relative or absolute URL when pressed.
- **Local Scenario Buttons**
  Lets users save states of an Xcelsius model to their local machines. Afterwards, these states or “scenarios” can quickly be loaded, even after closing the model, making the Scenario Buttons well-suited for saving and reviewing results of what-if analyses.

  See “Introduction to the Local Scenario Component” on page 145 for more information on local scenarios.

  Since these scenarios are saved to the local machine, the scenarios will **not** be available if the model is opened on a different machine. The **Remote Scenario Buttons** (available in the **Professional Edition only**) can be used to make scenarios available to multiple users on different machines.

  See “Using Collaboration” on page 209 for more information on remote scenarios.
- **Input Text**
  A simple, yet powerful input component which allows users to input values into the model by typing.
- **Input Text Area**
  Similar to the Input Text component, the Input Text Area allows users to input text into the model. The Input Text Area, however, allows users to type multiple lines of text, making it useful for comments or entries where the size of the input is unknown.

- **XML Data Button**
  Available in the **Professional Edition only**, the XML Data buttons allow users to refresh model data from an external source. Live model data can also be translated and sent to an external source using the XML Data Buttons.

  See "Using the XML Data Component" on page 192 for more information on XML features.

Sample Model: Icon

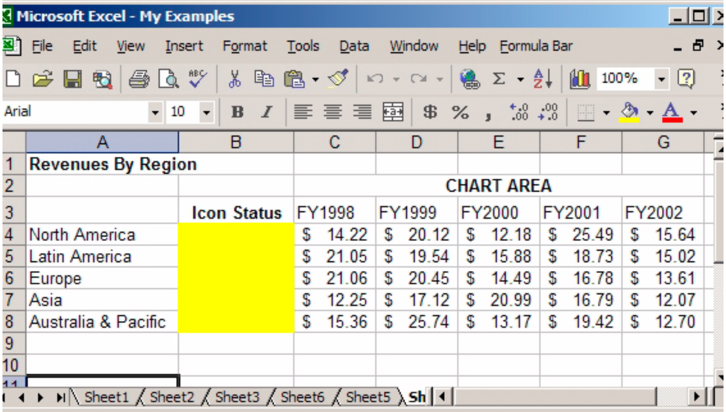
The Icon component is one of the most simple to use yet rich in functionality elements for enhancing your models. The Icon is a simple button that inserts two different values on a selected cell. By combining this simple action with features like Dynamic Visibility, you can create dazzling models with state-of-the-art effects.

Let's take the background example that contains an embedded world map. We want to place the Icon over some regions so that when you pass the pointer over each region a column chart appears.

See the previous section for more information on inserting an embedded JPG or SWF as a background.

1. Import the Excel file. The Excel file is shown below:

   The Excel file contains the revenues for five regions. We will use the range A4:A8 as the title for each Icon, the range B4:B8 as the Insert In range for each selection, and



	A	B	C	D	E	F	G
1	**Revenues By Region**						
2					CHART AREA		
3		**Icon Status**	FY1998	FY1999	FY2000	FY2001	FY2002
4	North America		$ 14.22	$ 20.12	$ 12.18	$ 25.49	$ 15.64
5	Latin America		$ 21.05	$ 19.54	$ 15.88	$ 18.73	$ 15.02
6	Europe		$ 21.06	$ 20.45	$ 14.49	$ 16.78	$ 13.61
7	Asia		$ 12.25	$ 17.12	$ 20.99	$ 16.79	$ 12.07
8	Australia & Pacific		$ 15.36	$ 25.74	$ 13.17	$ 19.42	$ 12.70
9							
10							

the Range C4:G8 as the source data to create the column chart.

2. After the Excel file has been imported into Xcelsius, insert an Icon on the canvas area and place it over the North America Region. Then click on the Icon to open the Property Sheet.

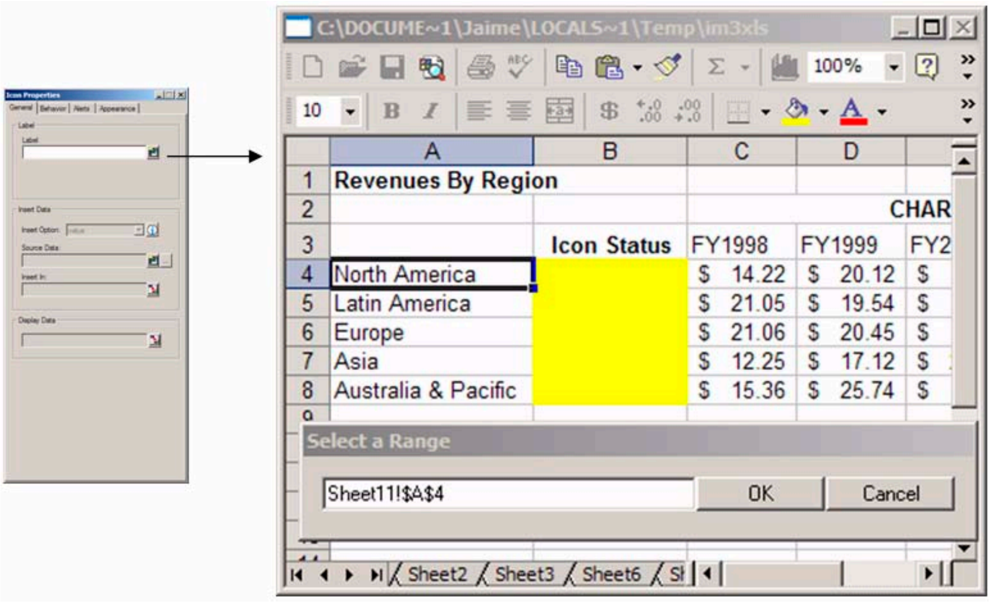
3. In the Property Sheet, click on the label icon to select the title that appears when you pass the pointer over the Icon. In this case, select North America.

   The Icon component uses two values that are inserted on a predefined cell. With each click or mouse over, it inserts one of the two values. Think of these as the ON and OFF positions: When the Icon is OFF, it inserts a certain value; when the Icon is ON, it inserts another value.

4. Click the Browse button (shown in the margin) under Source Data to define the values that the icon will insert.

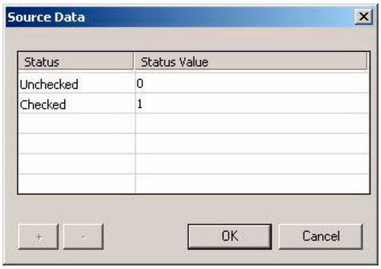
5. Insert the values 0 and 1, respectively.

   Xcelsius identifies the first value as the value to be inserted when the icon is OFF and the second value as the value to be inserted when the Icon is ON. This functionality is important when combining the Icon with other components using the Dynamic Visibility functionality. By default, the Display Status function makes a compo-



	A	B	C	D	
1	**Revenues By Region**				
2					**CHAR**
3		**Icon Status**	FY1998	FY1999	FY2
4	North America		$ 14.22	$ 20.12	$
5	Latin America		$ 21.05	$ 19.54	$
6	Europe		$ 21.06	$ 20.45	$
7	Asia		$ 12.25	$ 17.12	$
8	Australia & Pacific		$ 15.36	$ 25.74	$

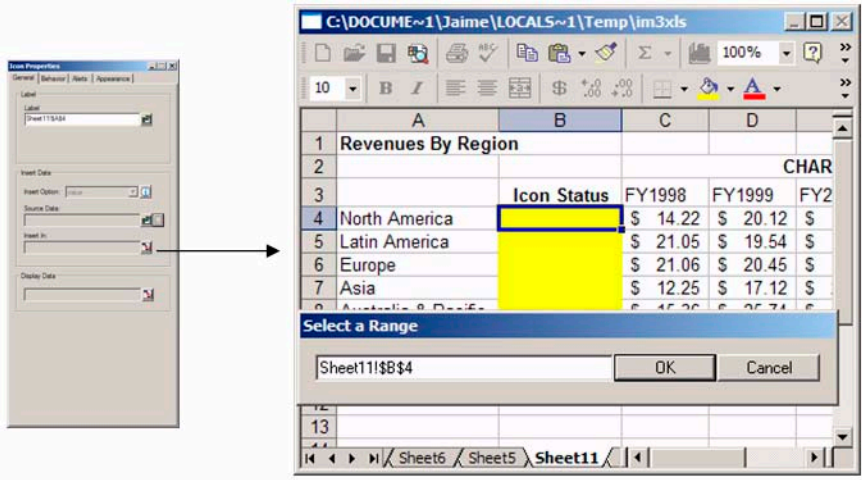
Sheet11!$A$4



Status	Status Value
Unchecked	0
Checked	1

nent invisible when the cell to which it is linked is different than 1. When the cell has the number 1 on it, the component becomes visible.

6. Specify where you want to insert the ON and OFF values. Click the Insert In icon and select the respective cell:



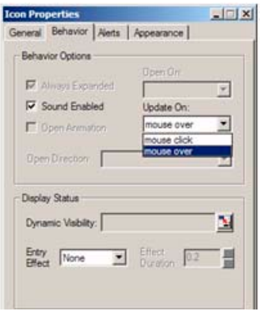
	A	B	C	D	
1	Revenues By Region				
2				CHAR	
3		Icon Status	FY1998	FY1999	FY2
4	North America		$ 14.22	$ 20.12	$
5	Latin America		$ 21.05	$ 19.54	$
6	Europe		$ 21.06	$ 20.45	$
7	Asia		$ 12.25	$ 17.12	$

Sheet11!$B$4

In this case, we have selected the cell B4. The result is that when the Icon is OFF, the cell B4 will have the number 0 on it. When the Icon is ON, the cell contains the number 1. If you link the Display Status of any component with a Display Key of 1 to the same cell, B4, the component becomes visible or invisible, depending on the Icon status.

There are some additional functions that are important to consider when working with the Icon component. For this example, we need to configure the icon so that it changes from OFF to ON by passing the pointer over it.

7. Click the Behavior tab and change the Update On status.



☑ Always Expanded
☑ Sound Enabled
☐ Open Animation
Update On: mouse over
Entry Effect: None
Effect Duration: 0.2

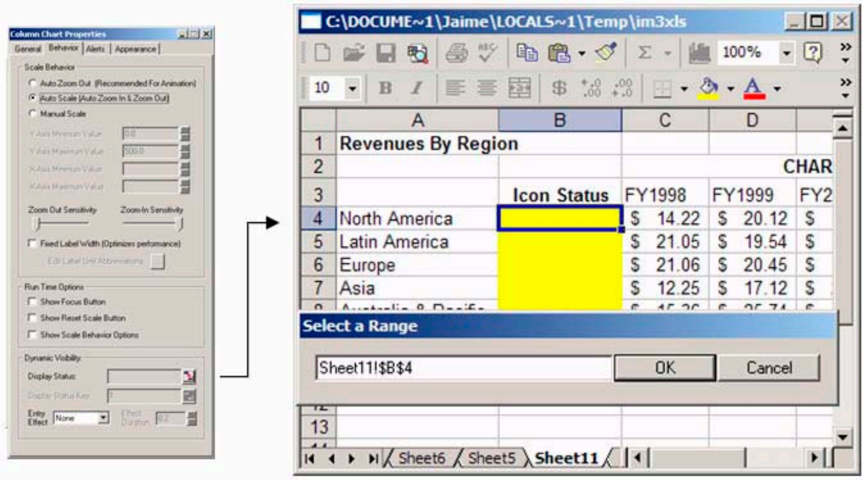
Why is this important?

Defining the Update on Mouse Over or Mouse Click is important to create user-friendly models. For example, if you use the Update on Mouse Click option, users will have to click on the icon to change its status to ON and then click on the icon again to turn it OFF. This can be inconvenient if you use more than one Icon, since there may be times when more than one Icon can be ON at the same time. You can make use of the Excel “IF” function to significantly increase the Icon functionality.

Returning to the example, at this point, the Icon has been successfully configured. The next step is to configure the column chart. For details about how to configure the chart, see Introduction to Charts.

8. When creating the chart, click on the Behavior tab and enable the chart Display Status function.

9. Click the Display Status icon and link it to the cell where the Icon is inserting its ON & OFF values.



Column Chart Properties

General | Behavior | Alerts | Appearance

Scale Behavior

○ Auto Zoom Out (Recommended For Animation)
● Auto Scale (Auto Zoom In & Zoom Out)
○ Manual Scale

Y Axis Minimum Value: 0.0
Y Axis Maximum Value: 500.0
X Axis Minimum Value
X Axis Maximum Value

Zoom Out Sensitivity
Zoom In Sensitivity

☐ Fixed Label Width (Optimizes performance)
Edit Label Unit Abbreviations

Run Time Options

☐ Show Focus Button
☐ Show Reset Scale Button
☐ Show Scale Behavior Options

Dynamic Visibility

Display Status:
Display Status Key: 1
Entry Effect: None
Effect Duration: 0.2

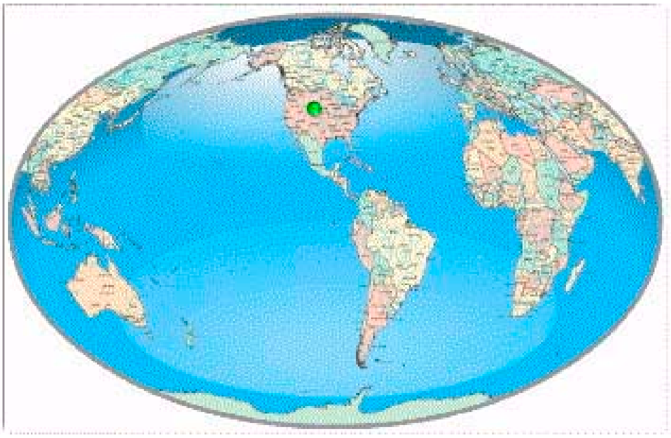
C:\DOCUME~1\Jaime\LOCALS~1\Temp\im3xls

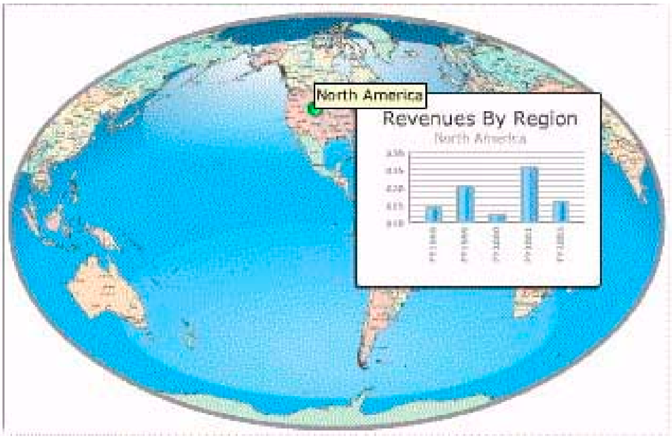
	A	B	C	D	
1	Revenues By Region				
2					CHAR
3		Icon Status	FY1998	FY1999	FY2
4	North America		$ 14.22	$ 20.12	$
5	Latin America		$ 21.05	$ 19.54	$
6	Europe		$ 21.06	$ 20.45	$
7	Asia		$ 12.25	$ 17.12	$

Select a Range

Sheet11!$B$4

The model is ready. When you pass the pointer over the North America Icon, the chart displaying the Revenues for this region becomes visible. When you move the pointer away, the chart disappears.





Additional Icon Functionality

You can enable the Alert Icon to change its color, depending on the comparison of actual data against target data. To enable this option, click on the Display data Icon and select the actual data. Then click on the Alerts tab and select the target value. For more information about using Alerts, see Introduction to Alerts.

Introduction to the Local Scenario Component

The Local Scenario component lets users save the current state of a model, making it well-suited for saving results of what-if analyses. Users can save any number of these results or scenarios and load them at any time, even after closing the model.

The scenarios created are specific to each model. As such, two models can have scenarios with the same names without interfering with one another.

The model can be moved or renamed on the same computer and will still be able to access its saved scenarios.

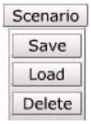
Scenarios saved in preview mode will not persist outside of the preview session. This includes exporting and snapshots to PowerPoint or to Outlook.

Note. Local Scenarios created on one computer will NOT be accessible to the model if it has been emailed or moved to another computer. See "Using Collaboration" on page 209 for more information.

How Does It Work?

To enable users to save, load, and delete scenarios, just add a Scenario component to the model.

When running the model, users can press the Scenario component to bring up the three option buttons for the scenarios: Save, Load, and Delete.

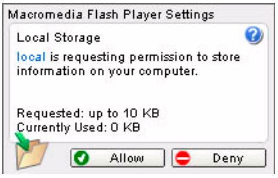


After one of the three options is chosen, a standard file dialog will appear, allowing the user to complete the operation.

Flash Player Settings

An unlimited number of scenarios can be saved in every model, as long as enough local storage is allocated for the Flash Player.

If a user attempts to save a scenario and there is not enough local storage, the Flash Player will prompt the user to allocate more.

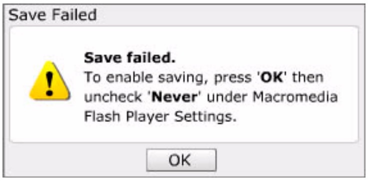


local is requesting permission to store information on your computer.

Requested: up to 10 KB
Currently Used: 0 KB

If more space is allocated, the scenario will be saved successfully. Otherwise, the scenario will NOT be saved.

If a user attempts to save a scenario and local storage has been disabled, the scenario component will ask the user to enable local storage and automatically open the Flash Player settings.

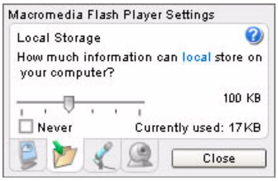


Save Failed

Save failed.
To enable saving, press '**OK**' then uncheck '**Never**' under Macromedia Flash Player Settings.

The scenario will NOT be saved until the user enables local storage and then saves.

The Flash Player settings can be opened manually by pressing the right mouse button anywhere on the model.



Macromedia Flash Player Settings

Local Storage

How much information can local store on your computer?

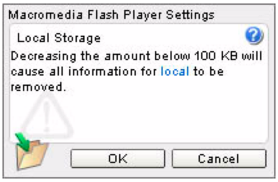
100 KB

☐ Never

Currently used: 17KB

Note. Setting the Local Storage amount of the Flash Player below what is currently used, or disabling local storage by checking the “Never” box will **erase *ALL*** saved scenarios on the computer. This includes scenarios created in other models.

The Flash Player will warn the user before allowing the scenarios to be erased.



Macromedia Flash Player Settings

Local Storage

Decreasing the amount below 100 KB will cause all information for local to be removed.

Loading a saved scenario should restore the model to almost exactly the same state it was in when it was saved. There are a few exceptions which don't directly affect the data model, such as cosmetic changes like if a Combo Box was opened/closed upon save. The states of external SWF files are also not restored when a scenario is loaded.

5

Chapter 5:
Using Advanced Features

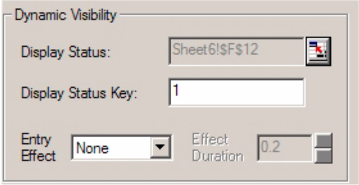
This chapter contains the following sections:

Introduction to Dynamic Visibility
  Functionality . . . . page 150
How to Use Alerts. . . . . .page 164
Using the Dynamic Web Query Option . . . . page 184
Using Web Services . . . . page 184
Using the XML Data Component . . . . .page 192
Using Collaboration . . . . page 209
Creating Templates . . . . .page 217
Using Global Styles. . . . . page 220

Introduction to Dynamic Visibility Functionality

The Dynamic Visibility functionality lets you control the visibility of a component. Using the Dynamic Visibility function, you can make a component appear or disappear in your final model based on the values inserted in a certain cell.

The Dynamic Visibility function is found on the Behavior tab on the Property Sheet.



Display Status: Sheet6!$F$12
Display Status Key: 1
Entry Effect: None
Effect Duration: 0.2

How Does it Work?

In Xcelsius, when a component is linked to a cell using the Display Status function, the component is visible or invisible depending on the cell value. By default, if the cell contains the number 1, the component is visible; if the cell is empty or has a value other than 1, the component is invisible.

Changing the Display Status Key

You can define any other value to activate the status list of a component. For example, you can specify that the Display Status Key is the name of a Metric or Indicator. When the cell in Excel has that specific metric name, the component is visible. Using the Display Status Key simplifies model creation.

Imagine that you need to show a world map to present the revenues by region. You want to use the Icon component on top of each region so that when you pass the pointer over it, a chart appears.

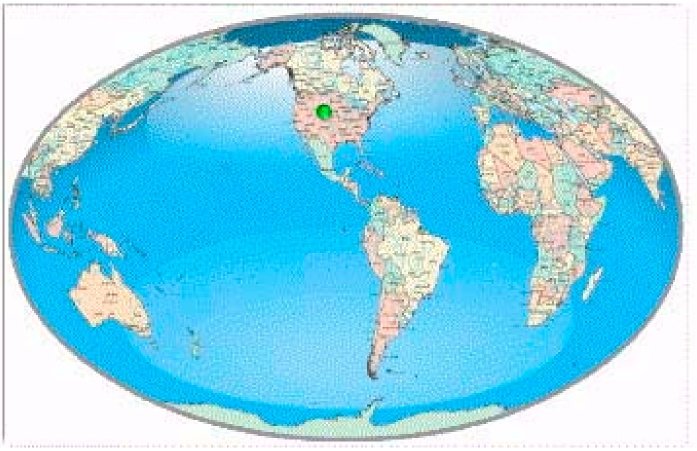
You can create a model that inserts the region name on a pre-defined cell when each icon is selected. All other icons will do the same; they will even use the same destination cell. Then you can create the various charts and use the Display Status Key to make each chart visible when the respective region name is on the pre-defined cell.

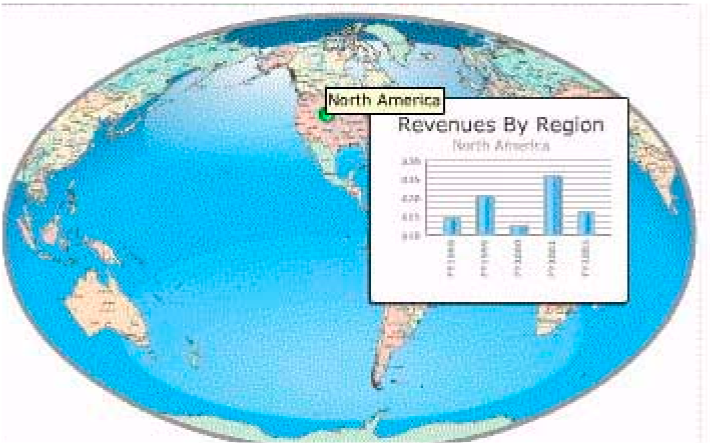
Since the destination cell will have no region name or just one region name at a time, you will see no chart or only one chart at a time, depending on the selection.

Why is This Important?

By understanding the Dynamic Visibility Functionality, you can create dazzling models that "open" new components when you click or pass the pointer over a selected area. For example, you can use an Icon that lets the user see a chart of revenues by region. You want the chart to be visible ONLY AFTER you click or pass the pointer over the Icon.

In this case, you will link the chart to the Icon so that when the Icon is not selected, the chart is not displayed, and when the Icon is selected, the chart is visible.

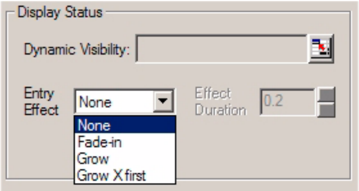




Entry Effect and Effect Duration

Entry Effects and Effect Duration are functions that let you add and control the way a component will be displayed. For example, in the above model you can enable the chart to appear with some effects once the Icon is selected. At the same time, you can control the Effect Duration. As a best practice, we recommend you not overuse the effect duration function. The effect duration may vary depending on the speed of your users' PC. Consider using small effect durations so that your model focuses on the data and appearance without creating distractions.

When creating a model, select and test the entry effect and choose the one that better suits your needs. There are four entry effects:

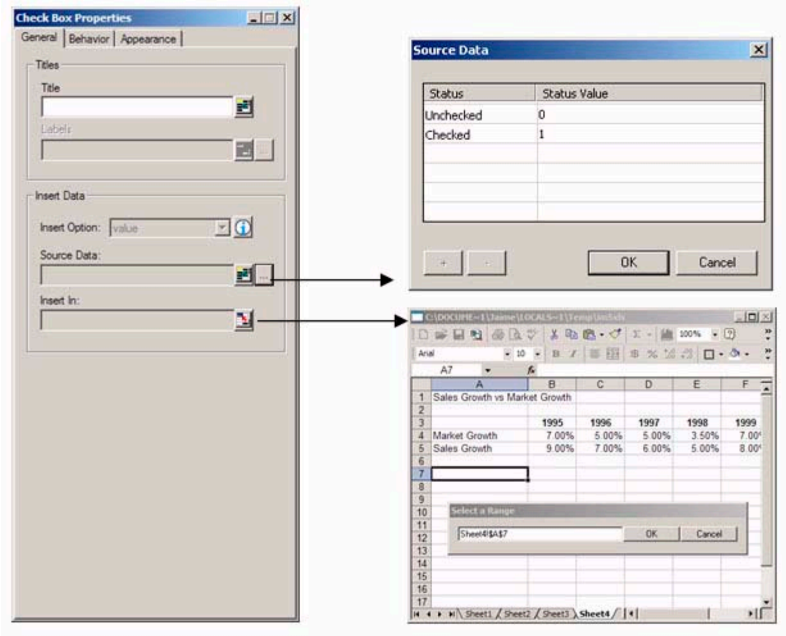


- **None**
  The component will not have any entry effect.
- **Fade-in**
  The component will become visible starting with a low transparency level until it reaches its full visibility status.
- **Grow**
  The component will become visible by growing in both width and height until it reaches it full size.
- **Grow X first**
  The component will appear beginning with the top corner until it reaches its full width, then continuing from top to bottom until it reaches its full height.

Sample Model: Dynamic Visibility

In this example, we will use a Check Box and a Column chart to demonstrate the Dynamic Visibility functionality.

The Check Box is a simple selector that uses the Value function. The Check Box has two positions: checked and unchecked. When the check box is checked, it will insert a certain value on the target cell, when the status is unchecked, it will insert a different value. Both values are defined by the designer when creating a model.



Insert Option: value

Status	Status Value
Unchecked	0
Checked	1

A7

	A	B	C	D	E	F
1	Sales Growth vs Market Growth					
2						
3		1995	1996	1997	1998	1999
4	Market Growth	7.00%	5.00%	5.00%	3.50%	7.00
5	Sales Growth	9.00%	7.00%	6.00%	5.00%	8.00

Select a Range: Sheet4!$A$7

In the Source Data area, we have selected two values: 0 & 1. Zero (0) indicates that the check box is unchecked and One (1) indicates the check box is checked. You can select any values.

In the Insert In area, we have selected the cell **A7** as the destination or target row. You can select any **empty cell**.

Now, when the check box is unchecked, the check box will insert the number Zero (0) in the target cell A7. When the Check Box is checked, it will insert the number one (1) in the target cell A7.

☐ Check Box is unchecked: The number Zero (0) is inserted in the target cell.

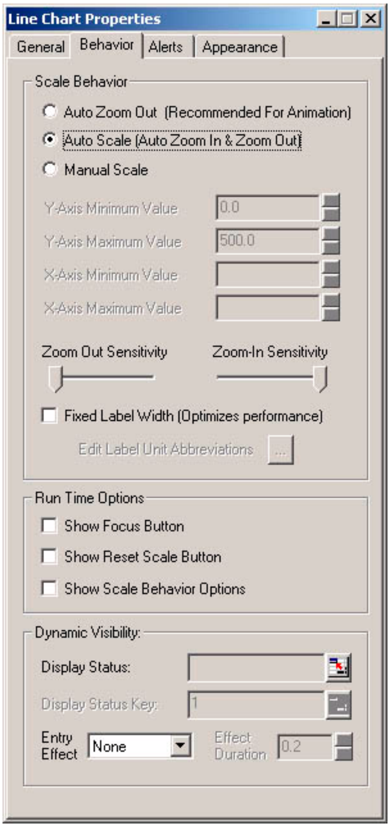
☑ Check Box is checked: The number Zero (1) is inserted in the target cell.

Check Box functionality gets powerful when you combine it with other components using the Display Status function. See the previous section for more details.

Let's suppose that when a component that is using Display Status is linked to a cell that contains the number 1, the component becomes visible. Any other number or value means that the components are invisible (hidden). Now, when you combine the Check Box and another component using the Display Status function, the result is extremely powerful.

Suppose that you need to create a model in which the user has the option to show or hide a chart. Once you have the chart configured (see “Using the Chart Components” on page 77 for more information) the next step is to use the Chart Display Status function and to link it to the Check Box Target cell, in this case the cell **A7**.

1. Click the Chart to edit the Property Window.



Scale Behavior

○ Auto Zoom Out (Recommended For Animation)
● Auto Scale (Auto Zoom In & Zoom Out)
○ Manual Scale

Y-Axis Minimum Value: 0.0
Y-Axis Maximum Value: 500.0
X-Axis Minimum Value:
X-Axis Maximum Value:

Zoom Out Sensitivity
Zoom-In Sensitivity

☐ Fixed Label Width (Optimizes performance)

Edit Label Unit Abbreviations ...

Run Time Options

☐ Show Focus Button
☐ Show Reset Scale Button
☐ Show Scale Behavior Options

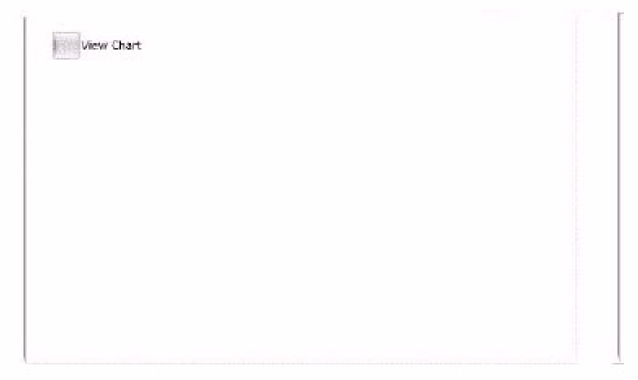
Dynamic Visibility:

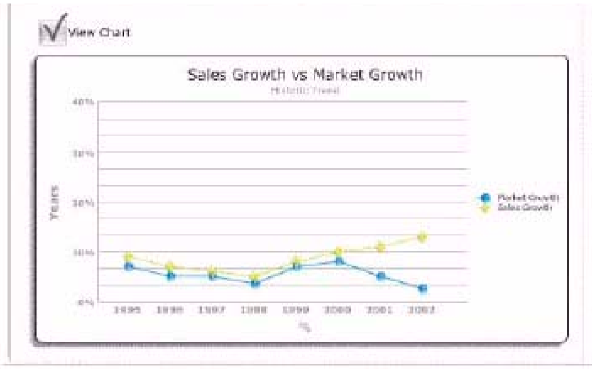
Display Status:
Display Status Key: 1
Entry Effect: None
Effect Duration: 0.2

2. Click the Behavior tab (second tab from left to right).

3. Click the Display Status icon and link it to the Check Box target cell, in this case **A7**.

The model is ready to be tested and published. By default, when you run the model, the chart won't be visible. Users must click on the Check Box to enable the chart. This function can add very interesting effects to your presentations.



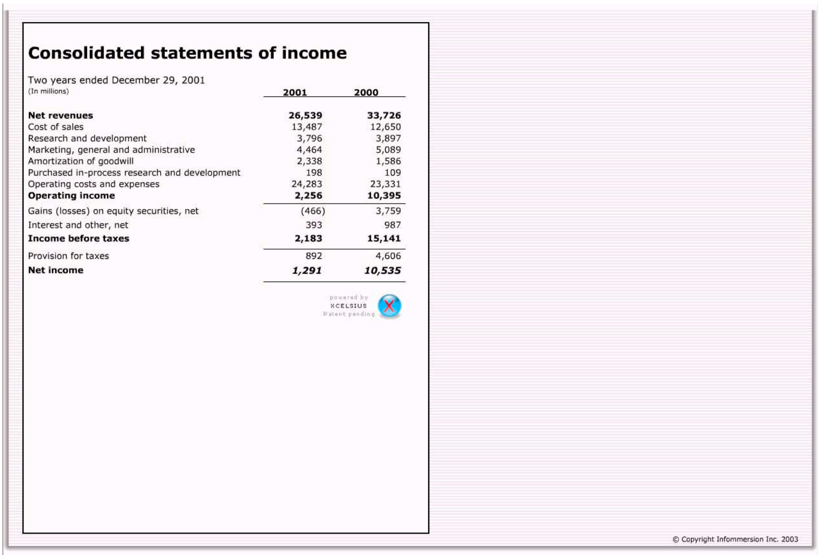


Other Dynamic Visibility Examples

You can use the Dynamic Visibility function to display ANY component that you want. Some ideas follow.

The picture below shows the Dynamic Visibility functionality. The user opens the model and sees a traditional Income Statement. The user can click on any account and, depending on the section, a new set of components appears. In this case, a Column chart with the historic net income trend and a world map with an icon over each region will appear. The icons represent the performance of each region. When you click on any of the icons, a new chart appears, in this case, a drill down chart by product.

This model shows the most important information on the first view, the Income Statement, and then lets you drill down and find more information for each account. It is like a “Tell-Me-More” model.



Consolidated statements of income

Two years ended December 29, 2001
(In millions)

	2001	2000
Net revenues	**26,539**	**33,726**
Cost of sales	13,487	12,650
Research and development	3,796	3,897
Marketing, general and administrative	4,464	5,089
Amortization of goodwill	2,338	1,586
Purchased in-process research and development	198	109
Operating costs and expenses	24,283	23,331
Operating income	**2,256**	**10,395**
Gains (losses) on equity securities, net	(466)	3,759
Interest and other, net	393	987
Income before taxes	**2,183**	**15,141**
Provision for taxes	892	4,606
Net income	***1,291***	***10,535***

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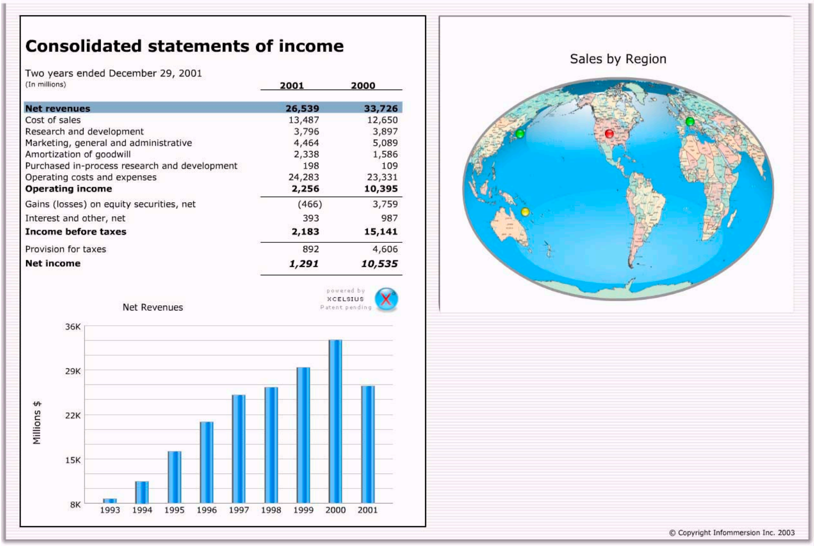

Consolidated statements of income

Two years ended December 29, 2001
(In millions)

	2001	2000
Net revenues	**26,539**	**33,726**
Cost of sales	13,487	12,650
Research and development	3,796	3,897
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Income before taxes	**2,183**	**15,141**
Provision for taxes	892	4,606
Net income	***1,291***	***10,535***

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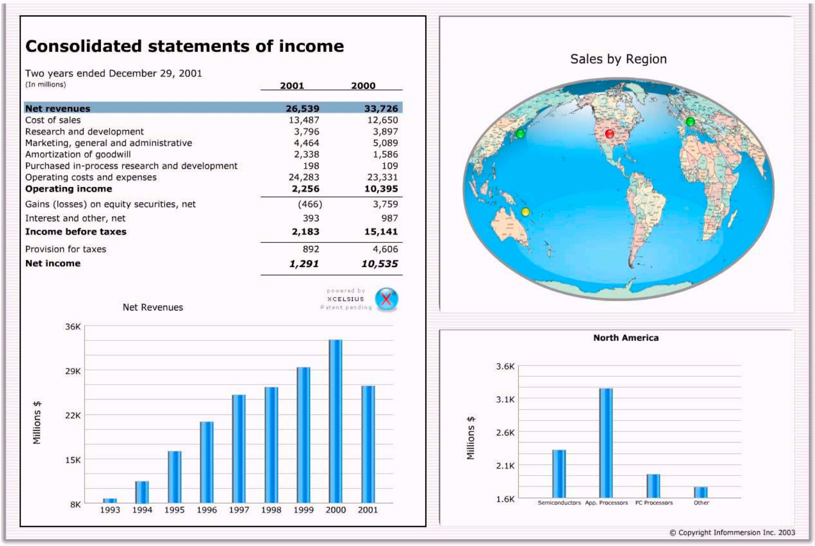

Consolidated statements of income

Two years ended December 29, 2001
(In millions)

	2001	2000
Net revenues	**26,539**	**33,726**
Cost of sales	13,487	12,650
Research and development	3,796	3,897
Marketing, general and administrative	4,464	5,089
Amortization of goodwill	2,338	1,586
Purchased in-process research and development	198	109
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Gains (losses) on equity securities, net	(466)	3,759
Interest and other, net	393	987
Income before taxes	**2,183**	**15,141**
Provision for taxes	892	4,606
Net income	***1,291***	***10,535***

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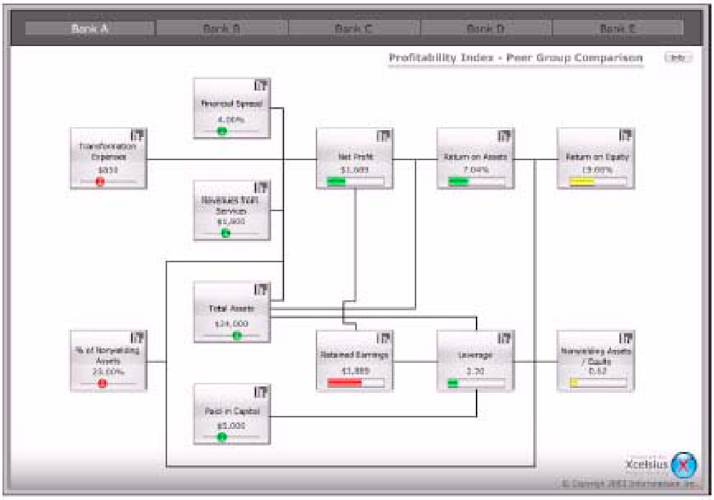
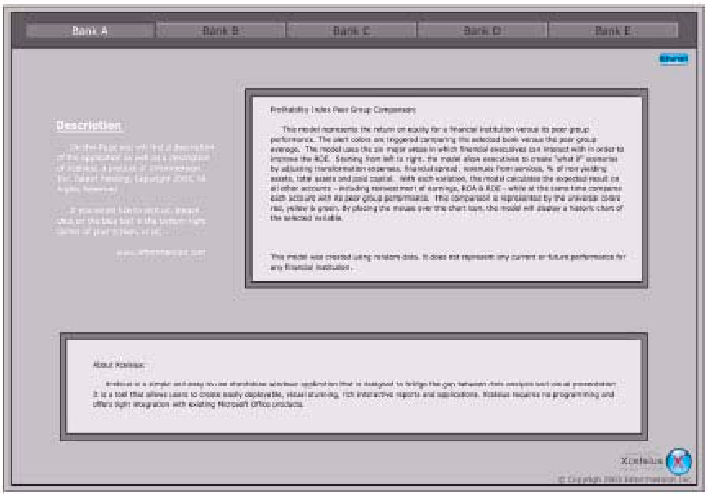
The following picture shows a model that uses the Dynamic Visibility function to enable text that explains the model content, data, author, etc. You might not want this information to be visible at all times. You can use the Dynamic Visibility function to show the text when you click on the Help Icon (Push Button).





Sample Model: Status List and Display Status

This section provides an example of the Status List and Display Status Functionalities.

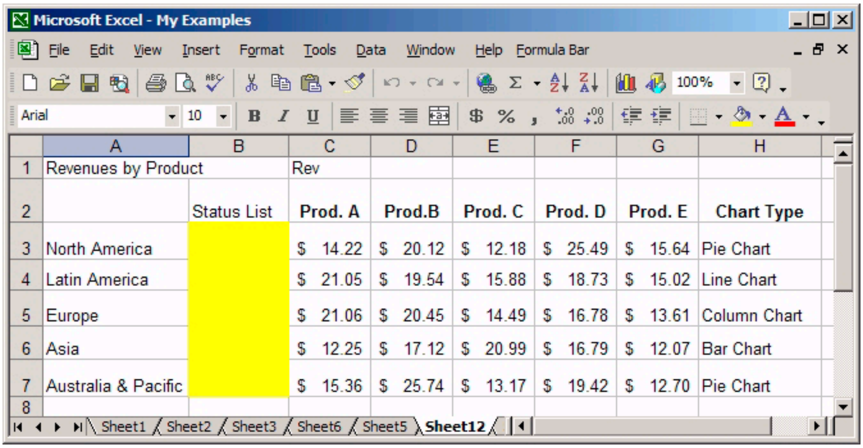
One of the most powerful and simple ways to create an appealing model is to combine the Status List and the Display Status functionalities.

For details about how the Status List function works, go to the Behavior Tab of selectors like Radio Button, Menu or Check Box, select the Status List Function and click on the Information icon (shown in the margin).

Example

Suppose you need to create a model that shows the revenues by region. You want the model to have different charts per each region so that you have several alternatives to analyze the information. In this example, you will use a Radio Button and some charts to do this.

The Excel file



	A	B	C	D	E	F	G	H
1	Revenues by Product		Rev					
2		Status List	Prod. A	Prod.B	Prod. C	Prod. D	Prod. E	Chart Type
3	North America		$ 14.22	$ 20.12	$ 12.18	$ 25.49	$ 15.64	Pie Chart
4	Latin America		$ 21.05	$ 19.54	$ 15.88	$ 18.73	$ 15.02	Line Chart
5	Europe		$ 21.06	$ 20.45	$ 14.49	$ 16.78	$ 13.61	Column Chart
6	Asia		$ 12.25	$ 17.12	$ 20.99	$ 16.79	$ 12.07	Bar Chart
7	Australia & Pacific		$ 15.36	$ 25.74	$ 13.17	$ 19.42	$ 12.70	Pie Chart
8								

The Excel file contains five different regions, and the data, with the revenues by different products. We will use the yellow range to insert the Status List function. Each region will correspond to one button on the radio button.

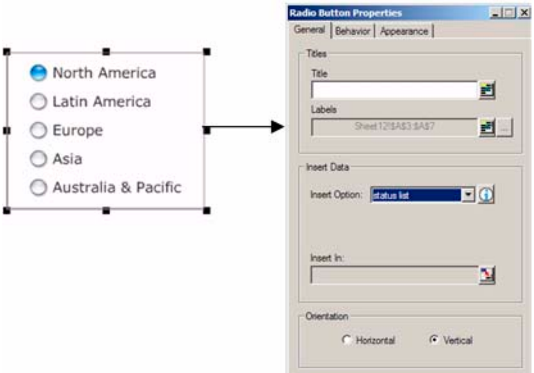
When a selection is made, the radio button will insert the number 1 on its respective cell, all other cells will have the number zero (0) by default. Then we will create several charts and will link their Display Status to the respective cell.

Since Xcelsius recognizes that when a cell has the number 1 on it, all components linked to that cell are visible, the result is that you will see only the chart that corresponds to the radio button selection.

Once you have imported the Excel file, the next step is to configure the Radio Button.

1. Insert a Radio Button on the canvas area and click on it to open the Property Sheet.

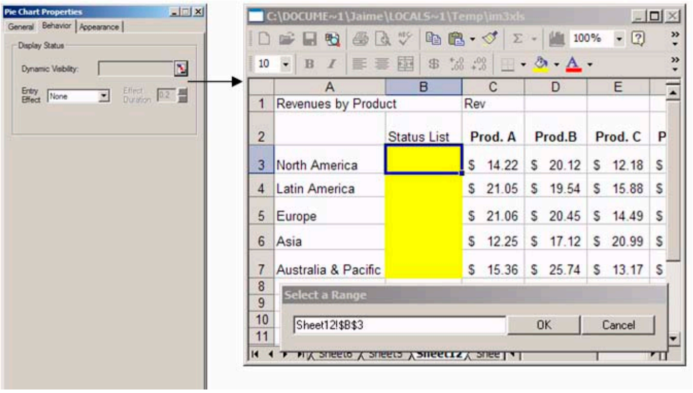
2. Click the Labels icon to select the Region names.



Labels: Sheet1!$A$3:$A$7
Insert Option: status list
● Vertical

3. Click the Insert Option box and select the Status List function.

4. Then, click on the Insert In icon and select the range into which the radio button will insert the Display Status values.



Entry Effect: None

Effect Duration: 0.2

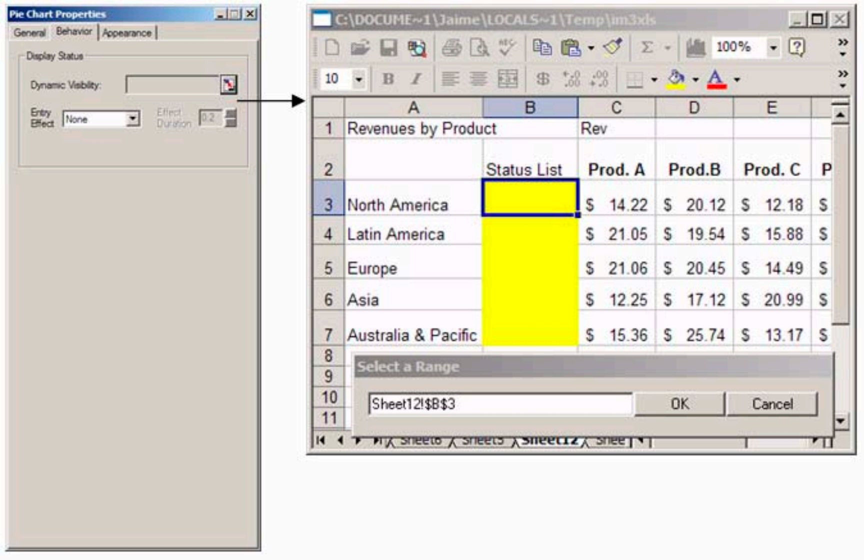
	A	B	C	D	E	
1	Revenues by Product		Rev			
2		Status List	Prod. A	Prod.B	Prod. C	P
3	North America		$ 14.22	$ 20.12	$ 12.18	$
4	Latin America		$ 21.05	$ 19.54	$ 15.88	$
5	Europe		$ 21.06	$ 20.45	$ 14.49	$
6	Asia		$ 12.25	$ 17.12	$ 20.99	$
7	Australia & Pacific		$ 15.36	$ 25.74	$ 13.17	$

Sheet12!$B$3

The next step is to configure the charts. The idea is to create five charts, one for each region, and to link them, using the Display Status function, to their respective cell. See “Using the Chart Components” on page 77 for more information on adding charts.

5. Once each chart has been configured, click on the Behavior tab and then click on the Display Status icon.

6. Select the respective cell that will control the visibility status for each chart. The first chart is linked to cell B3, the second chart is linked to cell B4, etc.



Dynamic Visibility:

Entry Effect: None

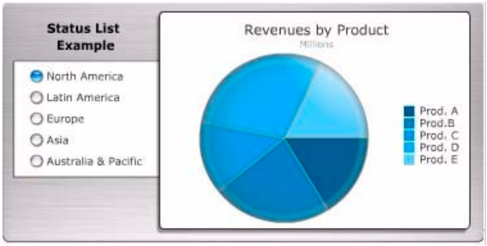
Effect Duration: 0.2

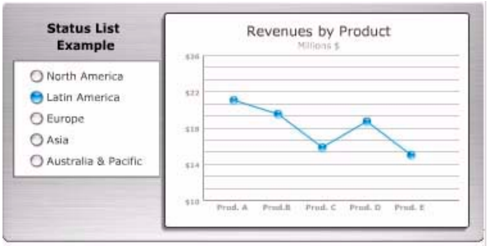
	A	B	C	D	E	
1	Revenues by Product		Rev			
2		Status List	Prod. A	Prod.B	Prod. C	P
3	North America		$ 14.22	$ 20.12	$ 12.18	$
4	Latin America		$ 21.05	$ 19.54	$ 15.88	$
5	Europe		$ 21.06	$ 20.45	$ 14.49	$
6	Asia		$ 12.25	$ 17.12	$ 20.99	$
7	Australia & Pacific		$ 15.36	$ 25.74	$ 13.17	$

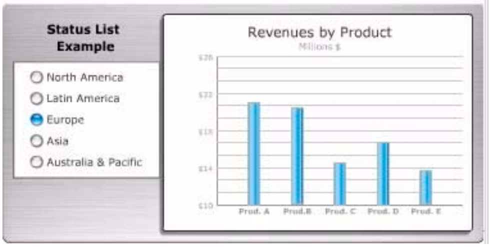
Sheet12!$B$3

Once you finish these steps, the model is ready to be published. Each Region selected on the Radio Button will show a different type of chart.

The model will look similar to the following:





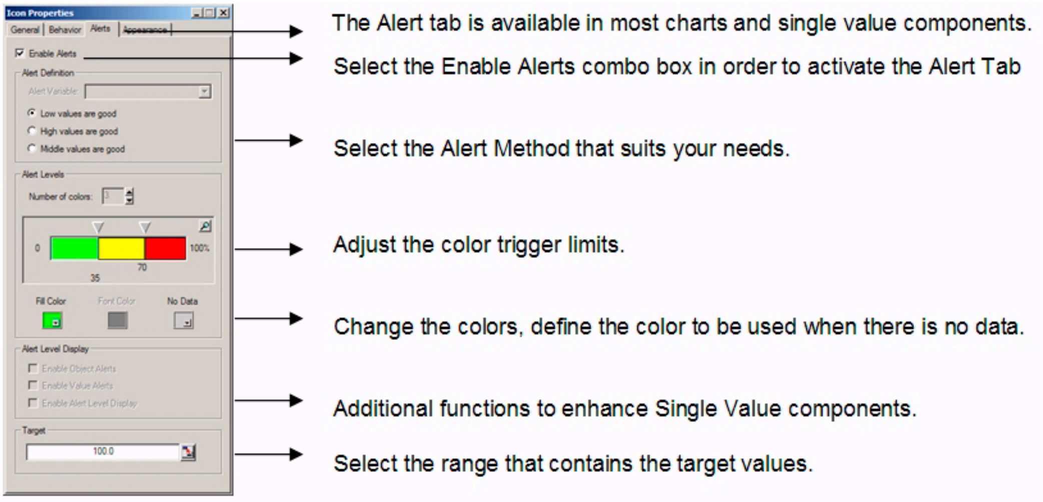


How to Use Alerts

Alerts are commonly used to call the attention of the user to a specific item or action that is outside some pre-established limits. The limits are called targets, budgets, benchmark, etc. and are a standard to which an item is compared. In all mature Business Intelligence applications, you will find the capability to trigger alerts when some conditions are not met. Xcelsius has one of the most advanced and user friendly Alerts methods available. Its flexibility, use and application is covered in this section.

Xcelsius lets you use alerts on most charts and single value components. As described in other sections, Xcelsius uses a Data Source function to link a range of values from the spreadsheet to the Xcelsius component. In the same way, when you are Using Alerts, you can link the Alert Data Source to the spreadsheet. Then, by using simple and easy-to-understand methods, you will be able to configure and customize the Alert levels, color, methods, etc.

On the Property Sheet, select the Alert Tab. This tab is available for those components, that by nature and logic, are expected to have alerts.



☑ Enable Alerts

● Low values are good
○ High values are good
○ Middle values are good

Number of colors: 3

☐ Enable Object Alerts
☐ Enable Value Alerts
☐ Enable Alert Level Display

Target: 100.0

The Alert tab is available in most charts and single value components.

Select the Enable Alerts combo box in order to activate the Alert Tab

Select the Alert Method that suits your needs.

Adjust the color trigger limits.

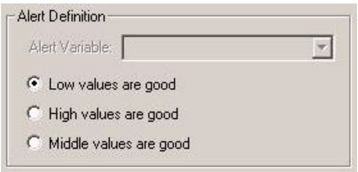
Change the colors, define the color to be used when there is no data.

Additional functions to enhance Single Value components.

Select the range that contains the target values.

The Alert Methods

Three alert methods are widely used in the market:



● Low values are good
○ High values are good
○ Middle values are good

- **Low values are good -** acceptable color is located to the left; unacceptable color is located to the right.
- **High values are good -** acceptable color is located to the right; unacceptable color is located to the left.
- **Middle vales are good -** acceptable color is located at the center.

These methods are based on different ways to measure the performance of the actual values against the target. In some cases, it is good to be below target, in other situations, it is good to be above target, and in other cases, it is good to be on the target.

- **Low values are good**
  Use this alert method when an actual value lower than the target value indicates acceptable performance.

  Examples: when measuring expenses or other cost-related accounts, where the objective is to spend less than the target.

  Acceptable color is located to the left; unacceptable color is located to the right.

- **High values are good**
  Use this alert method when an actual value greater than the target value indicates acceptable performance.

  Examples: when measuring revenues or income-related accounts, where the objective is to be at or above the target.

  Acceptable color is located to the right; unacceptable color is located to the left.

- **Middle values are good**
  Use this alert method when an actual value close to or below the target indicates acceptable performance.

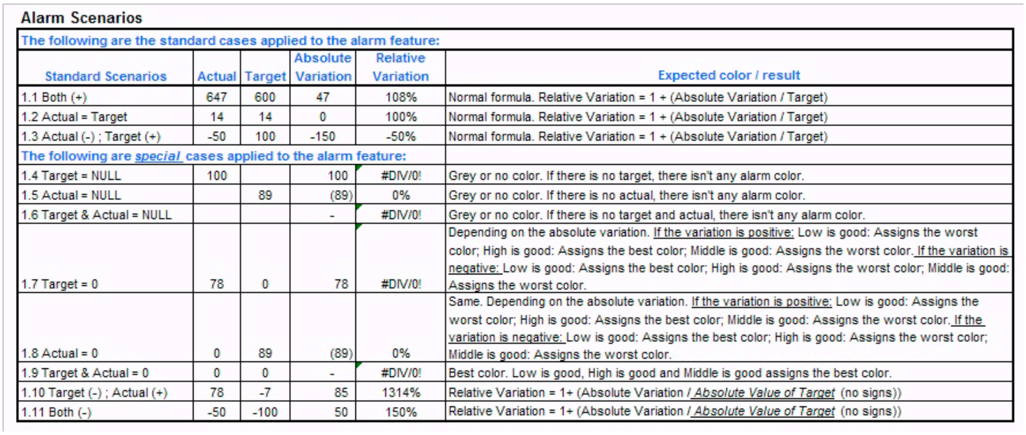
  Examples: when measuring inventory or headcount-related accounts, where the objective is to be close, above, or below the target. Values outside of this range with respect to the target indicate unacceptable performance.

Acceptable color is located at the center.

Calculating the Colors

Calculating the Alert colors is a bit more complex than it might look. Fortunately, Xcelsius already has all the formulas and validations in place so that you can focus on the result, not the method.

The following table describes the formulas used to calculate the alert color:



Alarm Scenarios

The following are the standard cases applied to the alarm feature:

Standard Scenarios	Actual	Target	Absolute Variation	Relative Variation	Expected color / result
1.1 Both (+)	647	600	47	108%	Normal formula. Relative Variation = 1 + (Absolute Variation / Target)
1.2 Actual = Target	14	14	0	100%	Normal formula. Relative Variation = 1 + (Absolute Variation / Target)
1.3 Actual (-) ; Target (+)	-50	100	-150	-50%	Normal formula. Relative Variation = 1 + (Absolute Variation / Target)
The following are *special* cases applied to the alarm feature:					
1.4 Target = NULL	100		100	#DIV/0!	Grey or no color. If there is no target, there isn't any alarm color.
1.5 Actual = NULL		89	(89)	0%	Grey or no color. If there is no actual, there isn't any alarm color.
1.6 Target & Actual = NULL			-	#DIV/0!	Grey or no color. If there is no target and actual, there isn't any alarm color.
1.7 Target = 0	78	0	78	#DIV/0!	Depending on the absolute variation. If the variation is positive: Low is good: Assigns the worst color; High is good: Assigns the best color; Middle is good: Assigns the worst color. If the variation is negative: Low is good: Assigns the best color; High is good: Assigns the worst color; Middle is good: Assigns the worst color.
1.8 Actual = 0	0	89	(89)	0%	Same. Depending on the absolute variation. If the variation is positive: Low is good: Assigns the worst color; High is good: Assigns the best color; Middle is good: Assigns the worst color. If the variation is negative: Low is good: Assigns the best color; High is good: Assigns the worst color; Middle is good: Assigns the worst color.
1.9 Target & Actual = 0	0	0	-	#DIV/0!	Best color. Low is good, High is good and Middle is good assigns the best color.
1.10 Target (-) ; Actual (+)	78	-7	85	1314%	Relative Variation = 1+ (Absolute Variation / *Absolute Value of Target* (no signs))
1.11 Both (-)	-50	-100	50	150%	Relative Variation = 1+ (Absolute Variation / *Absolute Value of Target* (no signs))

How to Select the Targets

On the Alert tab, click on the Target Selection icon to link the component to the range that contains or will contain the target. For single value components, you can manually enter the target in the Target Box area.

For charts, click on the Select Target Icon (shown in the margin) and link it to the desired range. Note that the target icon is dynamic, meaning the target range can be dynamically populated by other components, for example, a radio button.

Xcelsius Color Support

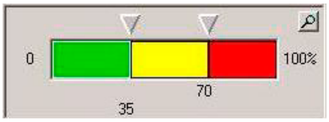
In Xcelsius, you can select from a minimum of two colors (it does not make sense to have just one color and alerts at the same time) to a maximum of 10 colors. This range of colors gives you flexibility. In a business report, the maximum level of colors that you might use could be four or five. In other types of reports, like market research or market concentration reports, you will probably use six or more.

You can increase or decrease the number of alert colors by clicking on the up or down arrows. New alert colors will be added in gray, to the left or right of the alert control panel, depending on the selected alert method.

Changing the Target Limits and Colors

You can use the alert color panel to adjust the percentages that will trigger the alert colors by dragging the gray arrows on top of the alert colors selector.

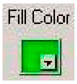
In the following picture, the component uses the Low Values Are Good alert method. The figure displays the most traditional way to measure performance: using the colors Red, Yellow and Green. Red is almost universally understood to convey caution or problems, yellow signifies awareness, and green means that there are no problems to report.



The same concept applies in business when using alerts. Since Green is located at the left side, this means that having a value lower than the target is the desired performance.

Fill Color

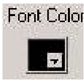
Use this procedure to change any alert color.

1. On the alert color selector, select the color to be changed by clicking on it.
2. Next, click  to assign a new alert color to the selected range.

Font Color

This option applies only if the Enable Value Alerts checkbox is selected. This lets you change the font color for the value alert display.

To change the font color

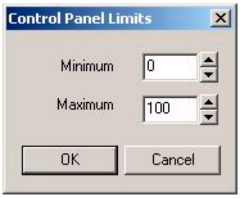
1. Select the range in the Alert Color selector that the font color applies to by clicking on it.
2. Next, click on  to assign the new font color.

No Data

This option defines the alert color that appears when any of the required values to calculate the alert color is missing. For example, if the target or actual value is missing for an alert level, the No Data color will be displayed instead of the color that was set using the Alert Color selector.

How to Change the Control Panel Limits

Click the zoom icon on the top of the control panel to change the panel limits. This option adjusts the minimum and maximum percentage limits that you want displayed on the alert colors selector. Use the up and down arrows to adjust the limits, or enter the required value. To adjust the minimum or maximum limits to values that overlap the alert tolerance levels, adjust the tolerance levels first and then set the minimum or maximum value to be displayed.



Minimum 0

Maximum 100

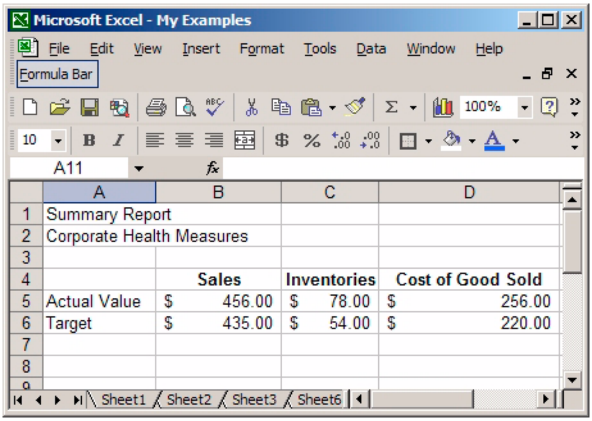
Sample Model: Single Value Using Alerts

This section describes an example of the Alert functionality applied to single value components. We will use the Gauge component to illustrate the example.

Example

Suppose that on a daily basis you receive a spreadsheet with some simple but important information about the status of your company. You get month to date Revenues, Inventory Balances and The Cost of Good Sold. You also have the target or budget for each account. You want to create a model that shows the actual balances Vs. the target for each account.

An example of an appropriate Excel file:

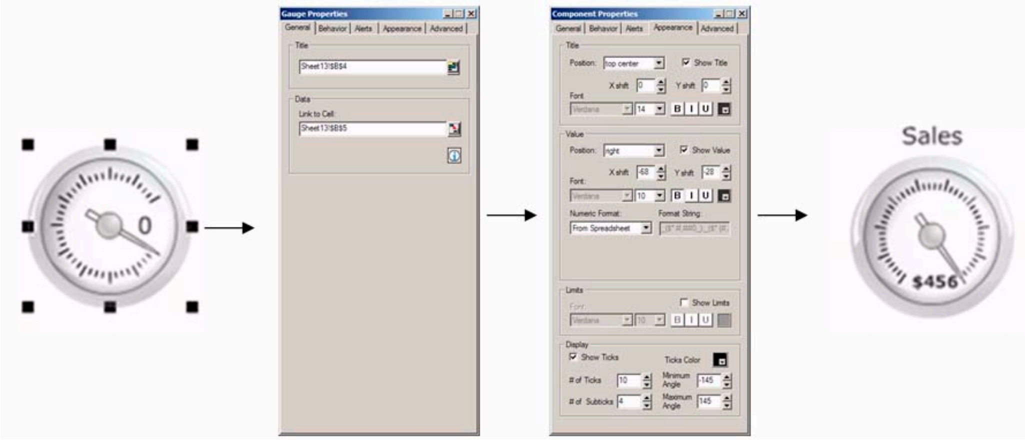


	A	B	C	D
1	Summary Report			
2	Corporate Health Measures			
3				
4		Sales	Inventories	Cost of Good Sold
5	Actual Value	$ 456.00	$ 78.00	$ 256.00
6	Target	$ 435.00	$ 54.00	$ 220.00
7				
8				

For each account, you have the Actual Balance and the target value.

1. As always, the first step is to Import the Excel file.

2. After this, insert a Gauge component on the canvas area and click on it to edit the Property Sheet.



Title: Sheet13!$B$4

Data

Link to Cell: Sheet13!$B$5

Title

Position: top center ☑ Show Title

X shift 0 Y shift 0

Font Verdana 14 B I U

Value

Position: right ☑ Show Value

X shift -68 Y shift -28

Font: Verdana 10 B I U

Numeric Format: From Spreadsheet

Limits

☐ Show Limits

Font: Verdana 10 B I U

Display

☑ Show Ticks Ticks Color

# of Ticks 10 Minimum Angle -145

# of Subticks 4 Maximum Angle 145

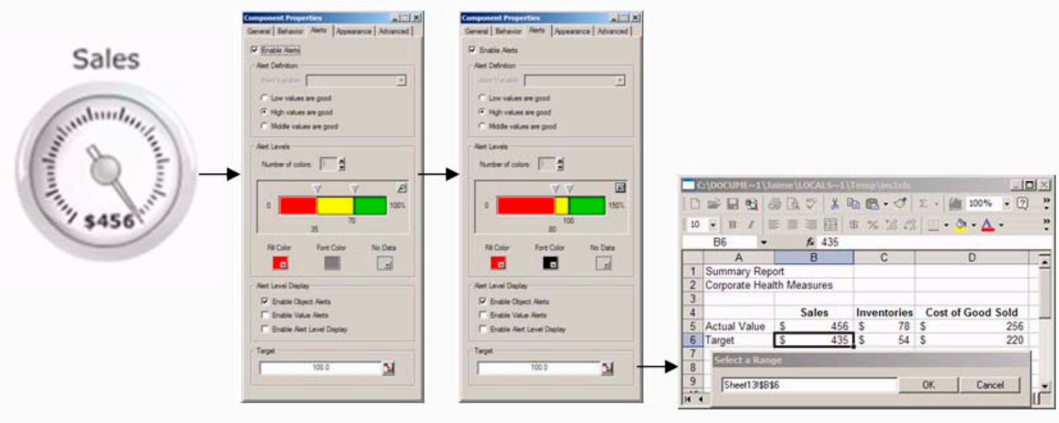
3. Click the Title icon and select the Gauge title, in this case, Sales.

4. Then, click on the Link to Cell icon and select the Actual Value for the Sales Gauge.

5. (Optional) Click the Appearance tab and customize the Gauge appearance.

   This is more a matter of personal preferences and tastes than any other technical reason. In this case, we have modified the minimum and maximum angles so that the Gauge looks personalized.

6. Now we will work with the Alert functions. Click the Alert tab and enable alerts.



☑ Enable Alerts

○ Low values are good
● High values are good
○ Middle values are good

Number of colors: 3

0 — 35 — 70 — 100%

0 — 80 — 100 — 150%

☑ Enable Object Alerts
☐ Enable Value Alerts
☐ Enable Alert Level Display

Target: 100.0

B6 435

	A	B	C	D
1	Summary Report			
2	Corporate Health Measures			
3				
4		Sales	Inventories	Cost of Good Sold
5	Actual Value	$ 456	$ 78	$ 256
6	Target	$ 435	$ 54	$ 220

Sheet1!$B$6

Since we are measuring Sales, the correct alert method is High Values Are Good. This means that if the actual value is above the target, the Gauge will be in green, if not, then it will be in yellow or red, depending on the percentage values assigned to each limit.

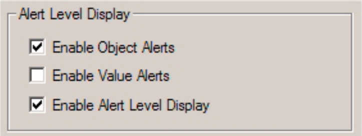
7. You can customize the color trigger limits by clicking on the zoom icon available on the alert color panel. Change the maximum limit to 200% or more. This does not affect the limits itself; it just changes the alert control panel look.

8. Then, drag and drop the color arrows and change the percentage limits. In this example, we have designated that if the actual is less than 80% of the target, we want the Gauge to show red, if it is between 81% and 99%, we want it to show yellow, and if it is 100% or more, then we want it to be green.

9. Next, we will assign the target or budget data. Click the Target icon and select the cell that contains the budget for the account Sales.

The Gauge has now been configured with respect to the Alert function. We have established the actual value, the alert method, the alert colors, the alert limits and the target value. The next step is to adjust the Gauge appearance so that it looks more elegant and precise.

10. One of the options is to enable the Alert Level Display functionality. This set of functions will add some elegant features to the Gauge component.



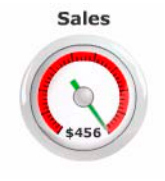
Alert Level Display

☑ Enable Object Alerts

☐ Enable Value Alerts

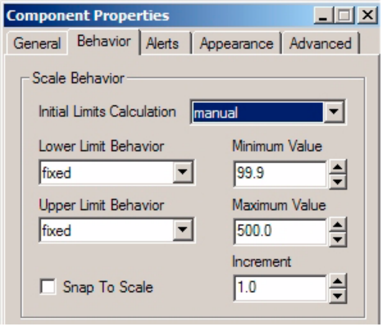
☑ Enable Alert Level Display

In this case, we have selected Enable Object Alerts (The Gauge pointer will change its color) and Enable Alert Level Display (will add the alert color spectrum around the Gauge).



11. The next step is to configure and adjust the lower and upper limits. Ideally, the Gauge should show the three alert colors. In this case, it is showing only one because the upper limit is smaller than the Gauge value.

Click the behavior tab and change the initial limits. See the Reference Guide for details about each specific option.



Scale Behavior

Initial Limits Calculation: manual

Lower Limit Behavior: fixed

Minimum Value: 99.9

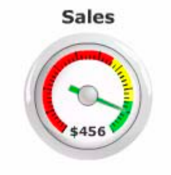
Upper Limit Behavior: fixed

Maximum Value: 500.0

Increment: 1.0

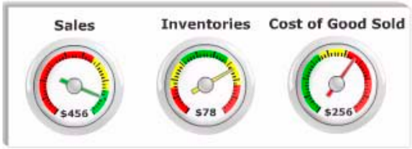
☐ Snap To Scale

In this case, we have selected the Manual method and we assigned the lower limit to be 99 and the upper limit to be 500. The Gauge will look like the following:



We can create the other two Gauges now. The best option is to copy and paste the current Gauge and then adjust the colors for the other two accounts.

The model will look like the following:

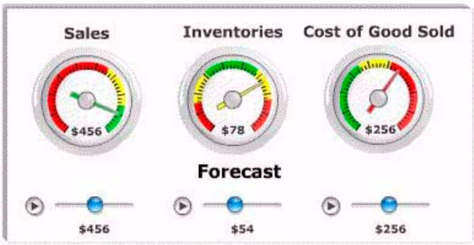


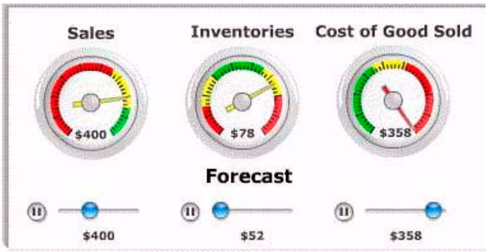
Note how each Gauge has a different Alert method. Sales uses High Values are Good, Inventories uses Middle Values Are Good, and Cost of Good Sold uses Low Values Are Good.

Your model is now ready to be published.

Additional Features

As an additional feature, you can add three sliders and link each slider to the Actual value for each account. The result is a dynamic model that will change the alert color as you adjust the Forecast for each account.



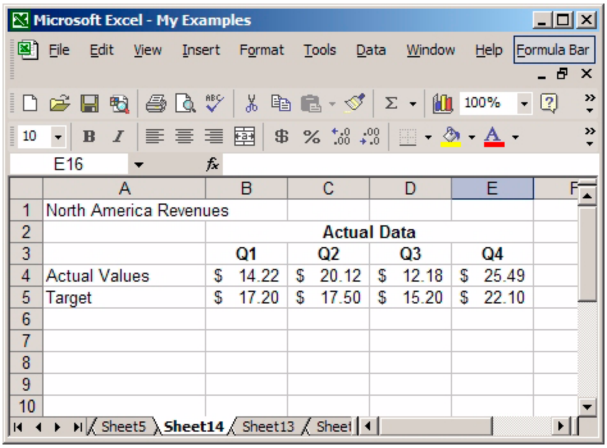


Sample Model: Charts Using Alerts

This section provides an example of the Alert function applied to a chart. We will use the Column Chart to illustrate a very simple example. This will give you the ammunition required to understand how the alert function works on charts.

Example

Suppose you need to create a chart that compares the actual quarterly revenues against the target revenues. The Excel file looks like the following:



	A	B	C	D	E
1	North America Revenues				
2		Actual Data			
3		Q1	Q2	Q3	Q4
4	Actual Values	$ 14.22	$ 20.12	$ 12.18	$ 25.49
5	Target	$ 17.20	$ 17.50	$ 15.20	$ 22.10

1. Once the Excel file has been imported, the next step is to insert a column chart on the canvas area.

2. Then click on the chart to edit the Property Window.

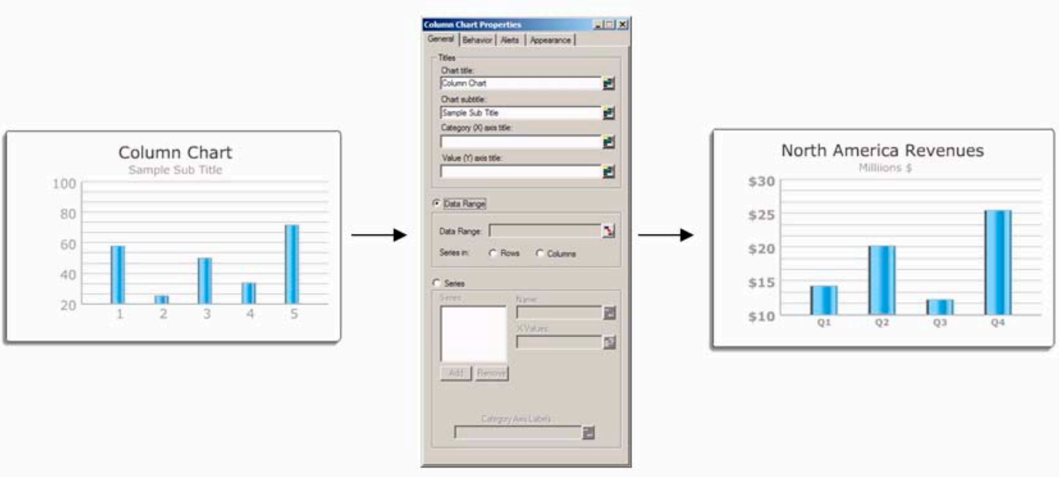
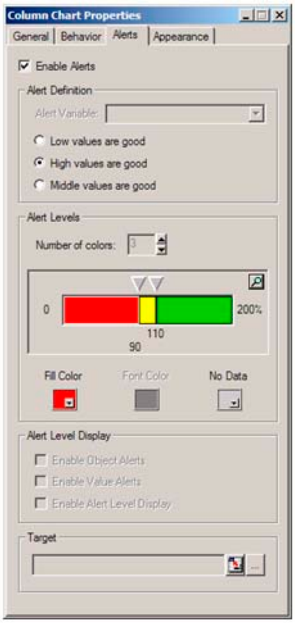


Chart title: Column Chart

Chart subtitle: Sample Sub Title

See "Using the Chart Components" on page 77 for more information about configuring charts.

3. We are ready to place an alert on this simple chart. Click the Alerts Tab. To enable alerts, check the Enable Alerts check box.



☑ Enable Alerts

Alert Definition

Alert Variable:

○ Low values are good

● High values are good

○ Middle values are good

Alert Levels

Number of colors: 3

Alert Level Display

☐ Enable Object Alerts

☐ Enable Value Alerts

☐ Enable Alert Level Display

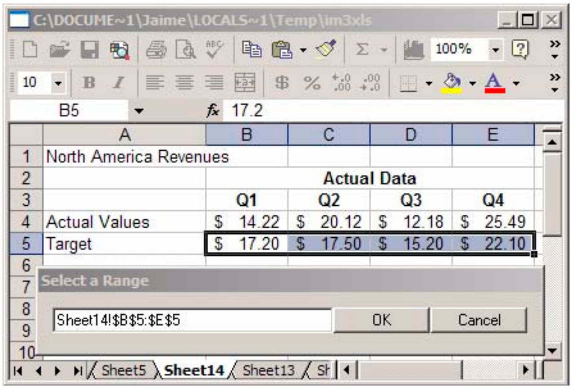
Target

4. Since the chart is measuring Revenues, the correct alert method is High Values Are Good. You will now want to adjust the trigger color levels. To do this, click on the zoom icon on the alert control panel and increase the alert panel maximum limit. Then simply drag and drop each arrow until you find the desired values.

   For this example, we have set the alerts with the following limits:

   - Red: Actual is 90% or less than Target.
   - Yellow: Actual is between 91% and 109% of Target.
   - Green: Actual is 100% or greater than Target

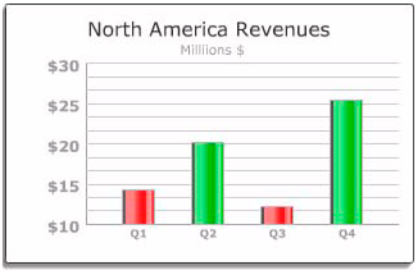
5. The next step is to actually select the target values from the spreadsheet. Click the Target icon and select the target values.



	A	B	C	D	E
1	North America Revenues				
2			Actual Data		
3		Q1	Q2	Q3	Q4
4	Actual Values	$ 14.22	$ 20.12	$ 12.18	$ 25.49
5	Target	$ 17.20	$ 17.50	$ 15.20	$ 22.10

Sheet14!$B$5:$E$5

The chart is now ready to be published. It will look like the following example:

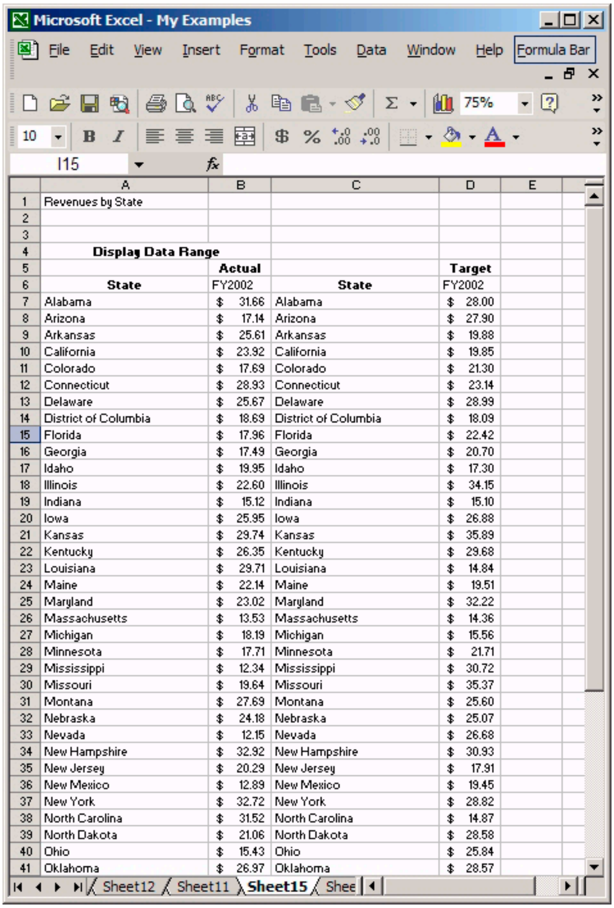


Note About Charts & Alerts. The above example describes a very simple use of charts and alerts. You can create more elaborate models by using a selector, chart and alerts. To do that, simply follow the same above instructions but link the chart actual and target data to the range where the selector is inserting the data.

Sample Model: USA Map Using Alerts

This section provides an example of how to create a model using the USA Map component and Alerts. See the chapter Sample Model USA Map for detailed instructions about how to configure the Map component.

We will use the same example used in the Sample Model USA Map chapter. In this case, the Excel file has two new columns: State Name and Target Value.

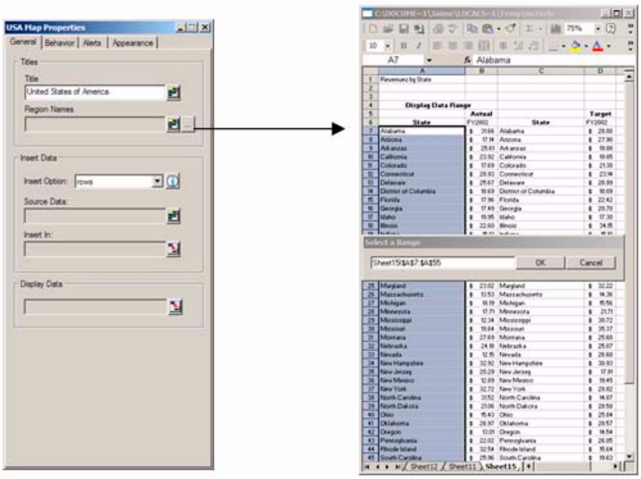


	A	B	C	D	E
1	Revenues by State				
2					
3					
4	**Display Data Range**				
5		**Actual**		**Target**	
6	**State**	FY2002	**State**	FY2002	
7	Alabama	$ 31.66	Alabama	$ 28.00	
8	Arizona	$ 17.14	Arizona	$ 27.90	
9	Arkansas	$ 25.61	Arkansas	$ 19.88	
10	California	$ 23.92	California	$ 19.85	
11	Colorado	$ 17.69	Colorado	$ 21.30	
12	Connecticut	$ 28.93	Connecticut	$ 23.14	
13	Delaware	$ 25.67	Delaware	$ 28.99	
14	District of Columbia	$ 18.69	District of Columbia	$ 18.09	
15	Florida	$ 17.96	Florida	$ 22.42	
16	Georgia	$ 17.49	Georgia	$ 20.70	
17	Idaho	$ 19.95	Idaho	$ 17.30	
18	Illinois	$ 22.60	Illinois	$ 34.15	
19	Indiana	$ 15.12	Indiana	$ 15.10	
20	Iowa	$ 25.95	Iowa	$ 26.88	
21	Kansas	$ 29.74	Kansas	$ 35.89	
22	Kentucky	$ 26.35	Kentucky	$ 29.68	
23	Louisiana	$ 29.71	Louisiana	$ 14.84	
24	Maine	$ 22.14	Maine	$ 19.51	
25	Maryland	$ 23.02	Maryland	$ 32.22	
26	Massachusetts	$ 13.53	Massachusetts	$ 14.36	
27	Michigan	$ 18.19	Michigan	$ 15.56	
28	Minnesota	$ 17.71	Minnesota	$ 21.71	
29	Mississippi	$ 12.34	Mississippi	$ 30.72	
30	Missouri	$ 19.64	Missouri	$ 35.37	
31	Montana	$ 27.69	Montana	$ 25.60	
32	Nebraska	$ 24.18	Nebraska	$ 25.07	
33	Nevada	$ 12.15	Nevada	$ 26.68	
34	New Hampshire	$ 32.92	New Hampshire	$ 30.93	
35	New Jersey	$ 20.29	New Jersey	$ 17.91	
36	New Mexico	$ 12.89	New Mexico	$ 19.45	
37	New York	$ 32.72	New York	$ 28.82	
38	North Carolina	$ 31.52	North Carolina	$ 14.87	
39	North Dakota	$ 21.06	North Dakota	$ 28.58	
40	Ohio	$ 15.43	Ohio	$ 25.84	
41	Oklahoma	$ 26.97	Oklahoma	$ 28.57	

By default, the USA Map has the list of the 50 States in alphabetical order. Before using the Map, you must indicate the codes to which each state is going to be identified on the Excel file.

For example, you may choose AL for Alabama, CA for California, etc. With this operation, the USA MAP will identify the data related to a cell that contains the code AL as being the data for Alabama, CA as being the data for California, etc.

In the following picture we used the same State name as the State Code.



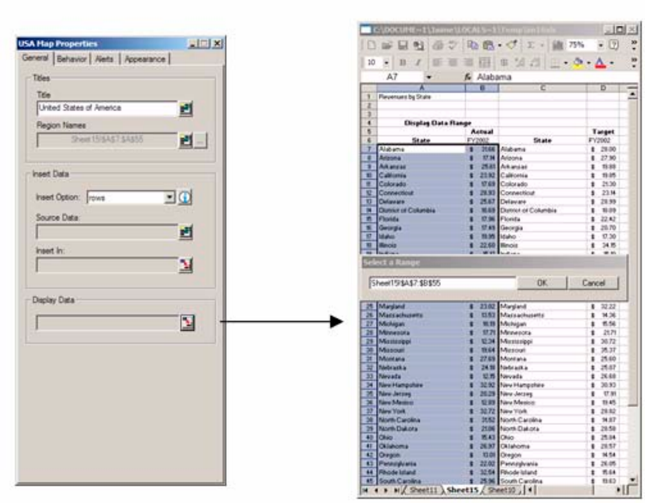
Title: United States of America

Insert Option: rows

Sheet15!$A$7:$A$55

The next step is to configure the Display Data. This is the Actual data that each State will have.

1. Click the Display Data icon and select the State name and the Actual values.

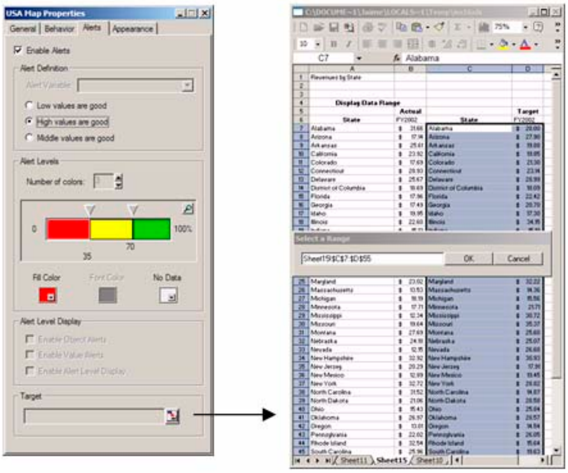


Title: United States of America

Insert Option: rows

Select a Range: Sheet15!$A$7:$B$55

2. We are ready to configure the Alerts. Click the Alert Tab. To enable alerts, check the Enable Alerts check box.



☑ Enable Alerts

○ Low values are good

● High values are good

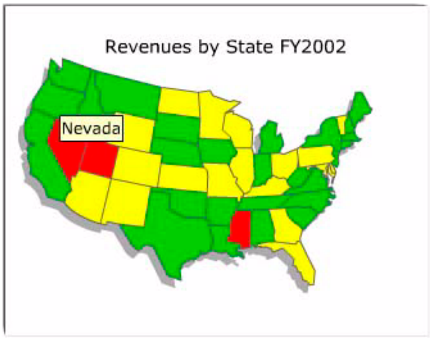
○ Middle values are good

Select a Range: Sheet15!$C$7:$D$55

3. Since the example will show the Revenues by State, select the High Values Are Good method.You can adjust the trigger color levels by dragging and dropping the color arrows.

4. The next step is to select the target data. As shown above, click on the Target icon and select the State Name and the Target value range.

Your model is now ready to be published. The map will show the Revenues by State Vs. the Target. Each State will be represented by an alert color depending on its performance.



Using Web Services

Xcelsius Professional Edition includes the **Use Web Service** option. With this feature you can create SWF files that periodically and automatically refresh data via an XML data source. Using this option is a two-step process. The first step is to configure and export a SWF file that will pull in data from a XML data source. The second step is to develop the XML source that the SWF file is going to access to retrieve the remote data. This XML source can be a local XML file, or a script running on a web server that returns XML data. The only requirement is that the XML data be in the correct format for the SWF file to read.

When you select the **Use Web Service** option, there is an option to generate a sample XML file that contains the XML structure that the SWF file needs to properly refresh the data. If you would like to pull in data from a database or an existing web service, a web developer's skills will be needed to develop the server-side code that will gather data from the data source and output the XML data.

Note. This functionality is only available in the Professional Edition of Xcelsius. This option was called Use Dynamic Web Query in previous version of Xcelsius.

Note. The Dynamic Web Query option will only refresh non-formula Static Data Sources when the model loads. Please see “Dynamic and Static Data Sources” on page 35 for more information on the difference between Static and Dynamic Data sources.

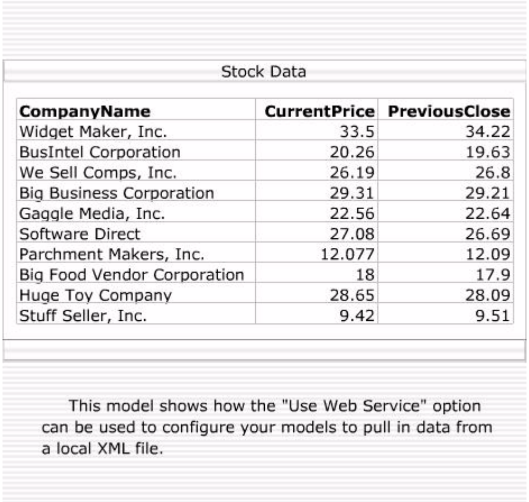
Note. Please see “Internet Explorer Caching Issues” on page 190 for an overview of caching issues when viewing Xcelsius content in Internet Explorer.

Note. Flash Player versions 7 or greater have new security features which may prevent your Xcelsius model from connecting with an external data source. Without a policy file, SWF files from one domain cannot access data on another domain or sub-domain. In addition, SWF files served over HTTP cannot access data at a HTTPS location. Please refer to the online article from Macromedia regarding security restrictions for data loading for information on creating a policy file to allow access to data in the cases above. For a direct link to this article, see the Xcelsius online help.

Example

Suppose you want to create a model that lists stock market data for several companies and you want your model to pull in the stock data from an XML source. For this scenario, you can use the **Use Web Service** option to configure your SWF file to pull in data from an XML source.

The following sections walk you through the process of configuring and exporting a SWF file that uses a XML data source to refresh the data for the model. The following example uses a local XML file as the data source. This same model could be configured to pull in data from a remote XML data source. All sections use the following model:



Stock Data

CompanyName	CurrentPrice	PreviousClose
Widget Maker, Inc.	33.5	34.22
BusIntel Corporation	20.26	19.63
We Sell Comps, Inc.	26.19	26.8
Big Business Corporation	29.31	29.21
Gaggle Media, Inc.	22.56	22.64
Software Direct	27.08	26.69
Parchment Makers, Inc.	12.077	12.09
Big Food Vendor Corporation	18	17.9
Huge Toy Company	28.65	28.09
Stuff Seller, Inc.	9.42	9.51

This model shows how the "Use Web Service" option can be used to configure your models to pull in data from a local XML file.

This model displays share price information for several companies.

Replace Data Selection

The first step when using the **Use Web Service** option is to select the range of cells that you wish to be updated.

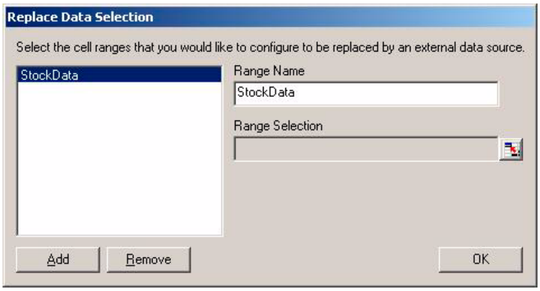
Example For our stock price example we want to update the current price and the previous close price. This means we need to select the cells that contain the company name, current price and previous close price. It is important to include the company name in this selection so that the web query knows which companies we want to update.

1. With your model on the canvas, on the **Data** menu, click on **Replace Data Selection**.

   This function lets you select the cell(s) that you want Xcelsius to modify each time the model is updated with the XML data.

   In this case, we want to select the cells which correspond to stock data.

2. Click Add to add a new range that we will call "Stock-Data".



Replace Data Selection

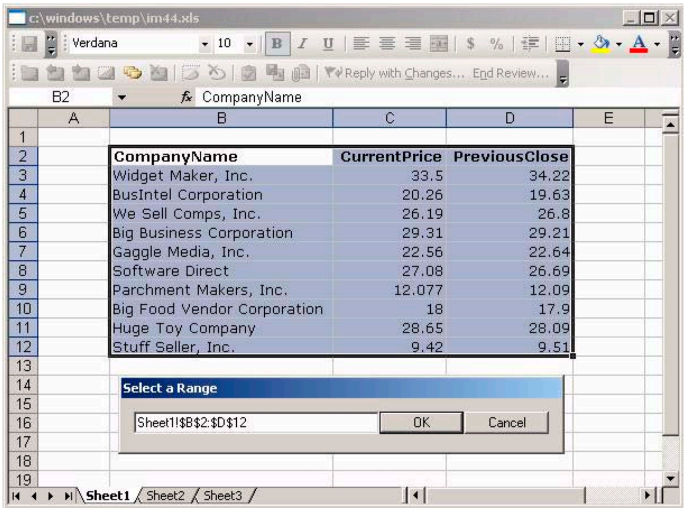
Select the cell ranges that you would like to configure to be replaced by an external data source.

StockData

Range Name: StockData

Range Selection:

3. Now click on the Range Selection icon to select the range of quotes from the Excel file.



B2 CompanyName

CompanyName	CurrentPrice	PreviousClose
Widget Maker, Inc.	33.5	34.22
BusIntel Corporation	20.26	19.63
We Sell Comps, Inc.	26.19	26.8
Big Business Corporation	29.31	29.21
Gaggle Media, Inc.	22.56	22.64
Software Direct	27.08	26.69
Parchment Makers, Inc.	12.077	12.09
Big Food Vendor Corporation	18	17.9
Huge Toy Company	28.65	28.09
Stuff Seller, Inc.	9.42	9.51

Select a Range

Sheet1!$B$2:$D$12

The next step is to configure the export settings and export the model.

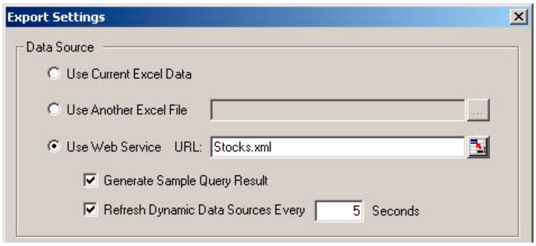
Exporting the Model

After the cells that are going to be updated have been selected, the next step is to configure the Export Settings.

Example, continued

1. With your model open and visible on the canvas, on the **File** menu, click on **Export Settings**.

2. Select the Use Web Service radio button.



Export Settings

Data Source

○ Use Current Excel Data

○ Use Another Excel File

● Use Web Service URL: Stocks.xml

☑ Generate Sample Query Result

☑ Refresh Dynamic Data Sources Every 5 Seconds

There are now three additional options that need to be configured:

- **URL textbox**
  Type in the URL of the web service that is going to return your XML data. You can enter a relative URL, like the example above, or you can enter an absolute URL.

  If you specify a relative URL like the above sample, the SWF file that gets exported will only refresh data if the file/script that was entered in the URL Textbox is in the same directory as the SWF file.

  If you want to use an absolute URL make sure that you include “http://” at the beginning of the URL. For our example, “Stocks.xml” is the name of the local XML file that contains the stock information for the companies that we have in our table.
- **Generate Sample Query Result checkbox**
  Checking this option will export a sample XML file when the SWF file is exported.

  If this option is checked, an .xml file will be generated that has the same name as the SWF file that is exported and will contain the default value of the replace data ranges. This sample file can be used as the data source for your model, or it can be used as a template by your web developer to ensure that the XML data that is returned from your web service is formatted correctly. For our example we are going to check this box so that our “Stocks.xml” source file will get generated.
- Refresh Dynamic Data Sources checkbox
  The default behavior for the Use Web Service option is for the SWF file to query the specified web service when the SWF file is loaded into the browser.

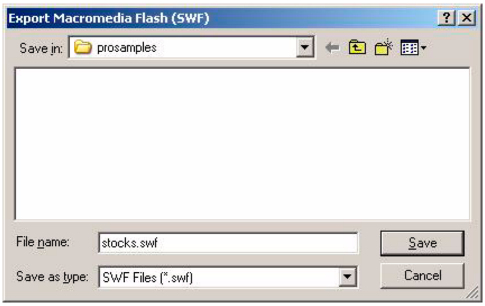
  The Refresh Dynamic Data Sources option will query the web service when the SWF file loads and will continue to query the service every n number of seconds.

In the above sample the SWF file that gets generated will pull in the latest data from the “Stocks.xml” file every five seconds.

The next step is to generate the SWF file.

3. From the **File** menu, click on **Export**, and then click **Macromedia Flash (SWF)**.

4. Enter a name for the SWF file that will be generated and click Save to generate the SWF file. For this example, we will enter the name “Stocks.swf”. Because we selected the Generate Sample Query Result check box on the Export Settings Dialog, a file named “Stocks.xml” will also be generated in the same location.



Save in: prosamples

File name: stocks.swf

Save as type: SWF Files (*.swf)

Now that the Stocks.swf file has generated we can test our model.

Open the Stocks.swf file in your web browser. Open the Stocks.xml file (using a in a text editor like Notepad or your own XML editing tool) and modify the some of the values. Save the changes to the Stocks.xml file.

You should see those changes reflected in the Stocks.swf file in a couple of seconds. If you don't see your changes reflected in the Stocks.swf file, and are using Internet Explorer, please see “Internet Explorer Caching Issues” on page 190 for more information.

Note. When constructing the XML file or the script that will provide XML data to the flash file, be aware that white space that appears inside node elements is significant. Make sure that your code does not insert (unintended) leading or trailing white space inside node elements.

Internet Explorer Caching Issues

The default behavior of Internet Explorer is to only check for new versions of files when Internet Explorer starts. This default behavior prevents Xcelsius models that have been configured to use the Dynamic Web Query option to “Refresh Every N Seconds” from refreshing properly. There are a couple of ways to get around this behavior so that your Xcelsius models refresh properly.

Note. This behavior and the solutions described in this section only apply to the Internet Explorer web browser.

Solutions

Server Solution

You can configure your server side scripts to tell the Internet Explorer client that the cache has expired. This will cause Internet Explorer to pull the latest data down from the server. This solution is the preferred solution because it will work for all viewers of your Xcelsius content regardless of their Internet Explorer settings.

Sample Server Code

- This can be accomplished in a **ASP.NET** script by including the following line in your script:

```
Response.Cache.SetExpires(DateTime.Now);
```

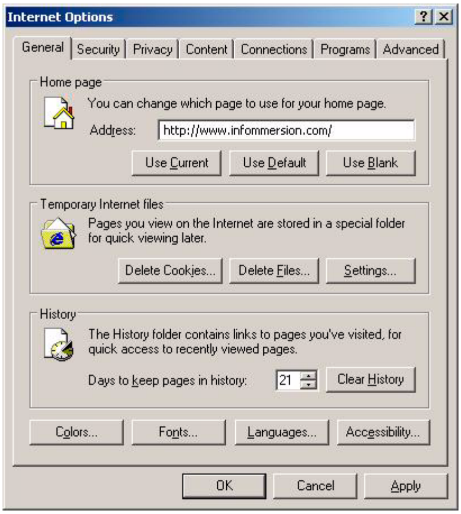
- This can be accomplished in a **JAVA** script by including the following lines in your script:

```
response.setHeader("Cache-Control","no-
cache"); //HTTP 1.1
response.setHeader("Pragma","no-cache"); //
HTTP 1.0
response.setDateHeader ("Expires", 0); //
prevents caching at the proxy server
```

Client Solution

If you change the client settings so that Internet Explorer checks for newer versions of files on every visit to the page, Xcelsius models that have been configured to use the “Refresh Every N Seconds” option will display properly. This solution is less desirable because it requires you to make a change to all client machines that will be viewing your Xcelsius content.

1. From within Internet Explorer select the Tools|Internet Options menu item to get the following dialog:



You can change which page to use for your home page.

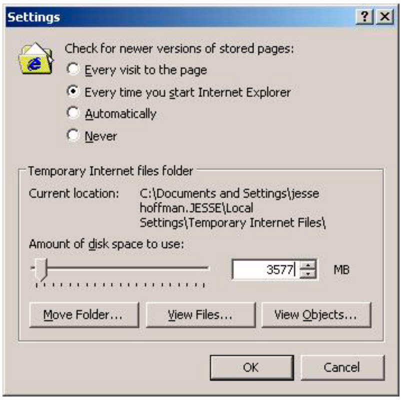
Address: http://www.infommersion.com/

Pages you view on the Internet are stored in a special folder for quick viewing later.

The History folder contains links to pages you've visited, for quick access to recently viewed pages.

Days to keep pages in history: 21

2. Click on the "Settings..." button to display the following dialog:



Check for newer versions of stored pages:

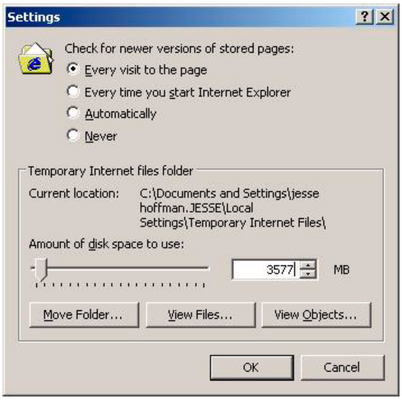
○ Every visit to the page
● Every time you start Internet Explorer
○ Automatically
○ Never

Current location: C:\Documents and Settings\jesse hoffman.JESSE\Local Settings\Temporary Internet Files\

Amount of disk space to use: 3577 MB

The default setting for "Check for newer versions of stored pages:" is "Every time you start Internet Explorer".

3. Change this setting to “Every visit to the page” and click OK.



Check for newer versions of stored pages:

● Every visit to the page

○ Every time you start Internet Explorer

○ Automatically

○ Never

Temporary Internet files folder

Current location: C:\Documents and Settings\jesse hoffman.JESSE\Local Settings\Temporary Internet Files\

Amount of disk space to use: 3577 MB

Using the XML Data Component

The Xcelsius Professional Edition gives you the XML Data component. This powerful component allows you to refresh model data from an external source via HTTP, similar to the Web Services option. In addition, the component can be used to **send** live model data to an external source. Form submission and data collection are common uses of sending data to an external source, but there are a multitude of different applications for this feature.

The data can be refreshed and sent periodically and automatically or on demand with the push of a button.

Note. This functionality is only available in the Professional Edition of Xcelsius.

Note. The XML Data cannot be used to refresh Static Data Sources for components. Please see “Dynamic and Static Data Sources” on page 35 for more information.

Note. Please see “Internet Explorer Caching Issues” on page 190 for an overview of caching issues when viewing Xcelsius content in Internet Explorer.

Note. Flash Player versions 7 or greater have new security features which may prevent your Xcelsius model from connecting with an external data source. Without a policy file, SWF files from one domain cannot access data on another domain or sub-domain. In addition, SWF files served over HTTP cannot access data at a HTTPS location. Please refer to the online article from Macromedia regarding security restrictions for data loading for information on creating a policy file to allow access to data in the cases above. For a direct link to this article, see the Xcelsius online help.

Configuring your model to refresh data from an external source takes just a few steps.

1. First, select and name the ranges in the spreadsheet that you would like to be refreshed. This is accomplished using the Load section on the General tab of the component properties.

2. The next step is to enter the URL of the external data source. This URL can point to any source that returns the properly formatted XML document, such as a static XML document or a server script that returns XML.

3. The final step is to setup the external data source to return the XML. Again, there are a number of different options for how to set this up. For example, you can create an XML file and manually update it as needed or write a server script that queries a database and translates the results into XML. Choose an implementation that suits your specific needs.

Setting up your model to send data to an external source is a very similar process.

1. You first select and name the ranges in the spreadsheet that you would like to send using the Send section of the component properties.

2. Next, enter the URL where you would like to send the data. Typically, this URL will address a server script. When the button is triggered, the ranges you selected will

be translated to XML and sent to the script via HTTP using the **POST** method. The script can parse the XML and execute appropriate actions, such as adding or modifying database entries based off of the translated data.

Note. A web developer's skills will be needed to develop any server-side code.

The XML Data component allows you to use both the send and the load functionality simultaneously through one URL. The send ranges are sent to the URL **prior** to retrieving the load data. This allows you to create scripts which examine the sent data and return data that corresponds to the values sent —much like a web request. For example, if a date was sent to a server script, the script could return the sales figures for that date.

Excel ranges are mapped to XML using a simple row-column structure. For example, a one-row, three-column range named “ExampleRange” would be represented in XML with:

```
<variable name="ExampleRange">
<row>
<column> Row1 Column1 value </column>
<column> Row1 Column2 value </column>
<column> Row1 Column3 value </column>
</row>
</variable>
```

where “Row1 Column1 value” would be the actual value of the cell in the first row and first column of the range, and so on.

The entire group of ranges is encapsulated within <data> tags.

During a load, XML is translated into Excel ranges using the reverse process.

You can quickly see the exact structure of the XML that corresponds to the ranges you have selected by using the Preview XML buttons in the component properties window.

Example

A polling application is one example which utilizes both the send and the load functionality. Votes must be sent to the server to be tallied and total results must be loaded from the server. The sections listed below walk you through the process of creating such an application and will help you develop your own applications using the XML Data component.

1. Part 1: Configuring the component: specify the server script that will communicate with the component.
2. Part 2: Send Data Selection: select the cells that will be sent to the server at run time.
3. Part 3: (Server-side) Receiving data from the XML Data component: develop the web script to receive and tally users' votes.
4. Part 4: Load Data selection: select the cells that will be updated at run time from the server.
5. Part 5: (Server-side) Sending data to the XML Data component: develop the web script to return the total poll results.

Part 1: Configuring the XML Data Component

To create applications that connect to external sources using the XML Data component, you first need to configure the connection and refresh options.

Each XML Data component can communicate with a different external source. This source needs to be specified in the URL options of the General tab of the component properties. The URL must be available to the generated SWF application at run-time in order for the data to be sent and loaded correctly.

The XML Data component also gives you several options for when to send and receive data from the external source. These are found under the Refresh Options of the Behavior tab in the component properties.

Example, continued

In our polling example, votes need to be tallied and up-to-date results need to be displayed. We can accomplish this by communicating with a server script that interacts directly with a database. In our example we will use an ASP .NET script called addresults.aspx, but there are no restrictions on how the server script needs to be implemented.

1. With your model on the canvas, open the Properties window of the XML Data component to the General tab.

2. Enter or select the URL where your server script is hosted.

   For our polling application we would only like to send and receive data once a user submits a vote, so automatic refreshing should be disabled.

3. With your model on the canvas, open the properties window of the XML Data component to the Behavior tab.

4. Verify that Refresh On Load and Refresh On Interval are unchecked.

Part 2: Send Data Selection

If you plan on creating an application that sends data to an external source, you should first select the ranges of cells that you want to send to the URL. Use the Send section of the component properties to add or remove ranges.

Example, continued

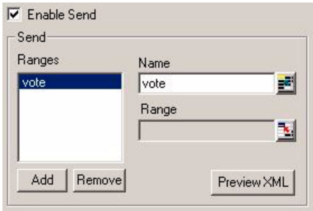
For our polling example we want to send users' votes to the server to be tallied. In this example users can vote on four separate categories using a series of sliders. By adding the cells that are tied to the sliders to the list of ranges to send, we can send the vote to the server.

1. With your model on the canvas, open the Properties window of the XML Data component to the General tab.

2. Select the Enable Send check box.

   This will allow you to define ranges of your model that you would like to send to the URL.

3. Click Add within the Send section to add a new range that we will call “vote”.



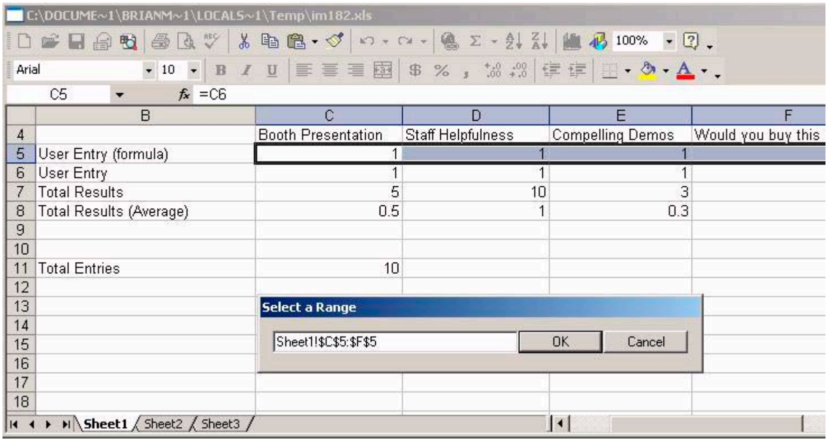
☑ Enable Send

Ranges: vote

Name: vote

Range:

4. Now click on the Range selection icon to select the range of the vote from the Excel file.



C:\DOCUME~1\BRIANM~1\LOCALS~1\Temp\im182.xls

C5 =C6

	B	C	D	E	F
4		Booth Presentation	Staff Helpfulness	Compelling Demos	Would you buy this
5	User Entry (formula)	1	1	1	
6	User Entry	1	1	1	
7	Total Results	5	10	3	
8	Total Results (Average)	0.5	1	0.3	
9					
10					
11	Total Entries	10			
12					
13					
14					
15					
16					
17					
18					

Select a Range

Sheet1!$C$5:$F$5

Part 3: (Server-side) Receiving data from the XML Data component

The XML Data component sends specified ranges in a simple, row-column structure. You can view the exact structure that will be sent to the server using the Preview XML button in the Send section. The server script should expect this XML structure.

Example, continued

The following example was developed to run on a Microsoft .NET web server. As stated above, there are no restrictions on how the web query needs to be implemented. This example is provided for demonstration purposes only, to showcase one example of how the server script for the polling application could be written.

The server script for our polling application has two functions. It must handle the data sent from the SWF and, in addition, return the updated totals for the poll. This section will focus on how the script receives the data and uses it to tally votes.

In order to tally users' votes, the server-side script must first examine the incoming XML data to extract the vote information. Using this information, the script can then record the vote by inserting it into a database.

The text of the files that make up the server-side implementation of tallying the votes can be seen below:

- SendPreview.xml - XML file generated by Xcelsius with the Preview XML button of the Send section

```
<data>
<variable name="vote">
<row>
<column>1.0</column>
<column>1.0</column>
<column>1.0</column>
<column>1.0</column>
</row>
</variable>
</data>
```

- addresults.aspx - C# script that reads the XML data and adds the parsed vote to the database.

```
<%@ Page Language="VB" aspcompat=true
Debug="true" validateRequest="false" %>
<%@ Import Namespace="System.Data" %>
<%@ Import Namespace="System.Data.SqlClient"
%>

<%

'Get XML that was send from SWF file
Dim sXMLString
```

```
dim item as String
For Each item In Request.Form
'Response.Write(item & " = " &
Request.Form(item) & VbCrLf)
sXMLString = sXMLString & item & " = " &
Request.Form(item)
Next

'Load XML into object
Dim oXML as Object
Dim oNodeList as Object
Dim oNode as Object

oXML =
Server.CreateObject("MSXML2.DOMDocument")
oXML.async = False
oXML.validateOnParse = False

'Response.Write(sXMLString)
'Response.Write(oXML.loadXML(sXMLString))
oXML.loadXML(sXMLString)

'Use XPath to get the data
dim sPath as String
sPath = "/data/variable/row/column"
oNodeList =
oXML.documentElement.selectNodes(sPath)

'Store data in an array
dim i, aVals(3)
i=0
For Each oNode in oNodeList
With oNode
' Just write the xml for that node to show
you.
'Response.Write(.text + "<br>")
aVals(i)=.text
i=i+1
End With
Next

'Insert data into database
```

```
Dim sSQL as String ' String variable for
building our query
Dim oCon as Object
dim oCmd as Object
dim sConnect as String

'Define insert statement
sSQL = "INSERT INTO ComdexPoll (Booth, Staff,
Demos, Buy) VALUES (" & aVals(0) & ", " &
aVals(1) & ", " & aVals(2) & ", " & aVals(3) &
")"

'Create connection object
sConnect = "Provider=SQLOLEDB;Data
Source=yourdb;Initial Catalog=yourdb;User
Id=user;Password=password;"
oCon =
Server.CreateObject("ADODB.Connection")
oCon.ConnectionString = sConnect
oCon.Open

'Create command object
oCmd = Server.CreateObject("ADODB.Command")
oCmd.ActiveConnection = oCon
oCmd.CommandText = sSQL

'Execute the command to insert the data
oCmd.Execute()

'Select new totals from the database
dim oRst as Object
oRst = Server.CreateObject("ADODB.RecordSet")
oRst.ActiveConnection = oCon
sSql = "select Sum(Booth) as Booth,
Sum(Staff) as Staff, Sum(Demos) as Demos,
Sum(Buy) as Buy, Count(ID) as TotalRecs from
comdexpoll"
oRst.Open(sSql)

'Build XML data to return
dim sXML as String
sXML = "<data>"
```

```
'totalData
sXML = sXML & "<variable name=" + chr(34) +
"totalData" + chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>" &
oRst("Booth").value & "</column>"
sXML = sXML & "<column>" &
oRst("Staff").value & "</column>"
sXML = sXML & "<column>" &
oRst("Demos").value & "</column>"
sXML = sXML & "<column>" & oRst("Buy").value
& "</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'totalEntries
sXML = sXML & "<variable name=" + chr(34) +
"totalEntries" + chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>" &
oRst("TotalRecs").value & "</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'userDefaults
sXML = sXML & "<variable name=" + chr(34) +
"userDefaults" + chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'close out the XML data string
sXML = sXML & "</data>"

'Now write the data out so that it gets
returned
Response.Write(sXML)
```

```
'Cleanup connection vars
oRst.close
oRst = Nothing
oCmd = Nothing
oCon.close
oCon = Nothing

%>
```

The sections of code related to Sending data to the XML Data component have been grayed out.

Part 4: Load Data Selection

In order to create an application that loads external data at run-time, first select the ranges of cells that you would like to be refreshed from the external source. You can accomplish this using the Load section of the XML Data component properties.

Example, continued

In addition to accepting users' votes, our polling application needs to retrieve and display up-to-date poll results using the Load functionality of the XML Data component.

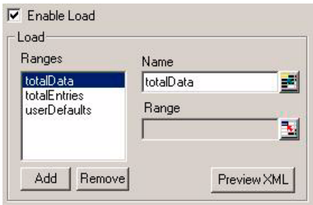
First configure the XML Data button to enable loading from the external data source:

1. With your model on the canvas, open the Properties window of the XML Data component to the General tab.
2. Select the Enable Load check box. This will allow you to define ranges of your model that you would like to be refreshed with data from the URL.

   In our application we'd like to display the average value of all the votes for each of the four categories that users can vote on. By adding a four-cell Load range, we create a range to which the server script can load the four averages into. A chart or other output component can easily be tied to these cells to display the numbers.

3. Click Add within the Load section to add a new range.

   Rename this range “totalData.”



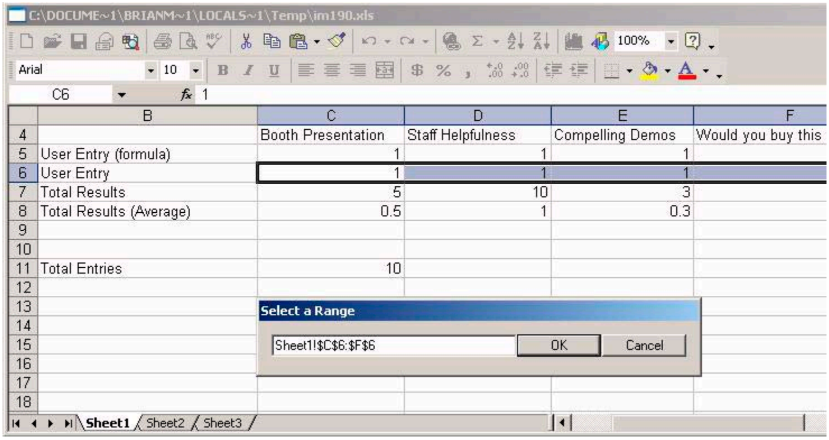
☑ Enable Load

Ranges: totalData, totalEntries, userDefaults

Name: totalData

Range:

4. Now click on the Range selection icon to select the range.



C6 fx 1

	B	C	D	E	F
4		Booth Presentation	Staff Helpfulness	Compelling Demos	Would you buy this
5	User Entry (formula)	1	1	1	
6	User Entry	1	1	1	
7	Total Results	5	10	3	
8	Total Results (Average)	0.5	1	0.3	
9					
10					
11	Total Entries	10			

Select a Range: Sheet1!$C$6:$F$6

Another metric that we would like to display in our application is the total number of votes. Like above, this value can be displayed by configuring a cell to load from external data and then linking that cell to an output component.

1. Click Add within the Load section to add a new range.

2. Rename this range “totalEntries”.

3. Now click on the Range selection icon to select the cell.

In order to clear the users' votes after they have been submitted, we can also configure the server script to return default data into the user input cells.

1. Click Add within the Load section to add a new range.
2. Rename this range “userDefaults”.
3. Now click on the Range selection icon to select the range used for user input.

Part 5: (Server-Side) Sending data to the XML Data component

The XML Data component expects to receive XML data in the same simple, row-column format that it uses to send range data. You can view the exact structure that the component is expecting by pressing the Preview XML button in the Load section.

Example, continued

The following example was developed to run on a Microsoft .NET web server. As stated above, there are no restrictions on how the web query needs to be implemented. This example is provided for demonstration purposes only, to showcase one example of how the server script for the polling application could be written.

The server script for our polling application has two functions. It must handle the data sent from the SWF and, in addition, return the updated totals for the poll. This section will focus on how the script returns poll results to the Xcelsius application.

In order to refresh our polling application with the latest results, the server-side script first queries a database to pull the most up-to-date data. The script then converts the data into the XML structure that the XML Data component is expecting. This XML is sent back to the component where it is converted back into data and used to update the model.

The text of the files that make up the server-side implementation of tallying the votes can be seen below:

- LoadPreview.xml - XML file generated by Xcelsius with the Preview XML button of the Load section.

```
<data>
<variable name="totalData">
<row>
<column>5</column>
<column>10</column>
<column>3</column>
<column>5</column>
</row>
</variable>
<variable name="totalEntries">
<row>
<column>10.0</column>
</row>
</variable>
<variable name="userDefaults">
<row>
<column>1.0</column>
<column>1.0</column>
<column>1.0</column>
<column>1.0</column>
</row>
</variable>
</data>
```

- addresults.aspx - C# script that reads the XML data and adds the parsed vote to the database.

```
<%@ Page Language="VB" aspcompat=true
Debug="true" validateRequest="false" %>
<%@ Import Namespace="System.Data" %>
<%@ Import Namespace="System.Data.SqlClient"
%>

<%

'Get XML that was send from SWF file
Dim sXMLString
```

```
dim item as String
For Each item In Request.Form
'Response.Write(item & " = " &
Request.Form(item) & VbCrLf)
sXMLString = sXMLString & item & " = " &
Request.Form(item)
Next

'Load XML into object
Dim oXML as Object
Dim oNodeList as Object
Dim oNode as Object

oXML =
Server.CreateObject("MSXML2.DOMDocument")
oXML.async = False
oXML.validateOnParse = False

'Response.Write(sXMLString)
'Response.Write(oXML.loadXML(sXMLString))
oXML.loadXML(sXMLString)

'Use XPath to get the data
dim sPath as String
sPath = "/data/variable/row/column"
oNodeList =
oXML.documentElement.selectNodes(sPath)

'Store data in an array
dim i, aVals(3)
i=0
For Each oNode in oNodeList
With oNode
' Just write the xml for that node to show
you.
'Response.Write(.text + "<br>")
aVals(i)=.text
i=i+1
End With
Next
```

```
'Insert data into database
Dim sSQL as String ' String variable for
building our query
Dim oCon as Object
dim oCmd as Object
dim sConnect as String

'Define insert statement
sSQL = "INSERT INTO ComdexPoll (Booth, Staff,
Demos, Buy) VALUES (" & aVals(0) & ", " &
aVals(1) & ", " & aVals(2) & ", " & aVals(3) &
")"

'Create connection object
sConnect = "Provider=SQLOLEDB;Data
Source=yourdb;Initial Catalog=yourdb;User
Id=user;Password=password;"
oCon =
Server.CreateObject("ADODB.Connection")
oCon.ConnectionString = sConnect
oCon.Open

'Create command object
oCmd = Server.CreateObject("ADODB.Command")
oCmd.ActiveConnection = oCon
oCmd.CommandText = sSQL

'Execute the command to insert the data
oCmd.Execute()

'Select new totals from the database
dim oRst as Object
oRst = Server.CreateObject("ADODB.RecordSet")
oRst.ActiveConnection = oCon
sSql = "select Sum(Booth) as Booth,
Sum(Staff) as Staff, Sum(Demos) as Demos,
Sum(Buy) as Buy, Count(ID) as TotalRecs from
comdexpoll"
oRst.Open(sSql)

'Build XML data to return
dim sXML as String
```

```
sXML = "<data>"

'totalData
sXML = sXML & "<variable name=" + chr(34) +
"totalData" + chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>" &
oRst("Booth").value & "</column>"
sXML = sXML & "<column>" &
oRst("Staff").value & "</column>"
sXML = sXML & "<column>" &
oRst("Demos").value & "</column>"
sXML = sXML & "<column>" & oRst("Buy").value
& "</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'totalEntries
sXML = sXML & "<variable name=" + chr(34) +
"totalEntries" + chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>" &
oRst("TotalRecs").value & "</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'userDefaults
sXML = sXML & "<variable name=" + chr(34) +
"userDefaults" + chr(34) + ">"
sXML = sXML & "<row>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "<column>5</column>"
sXML = sXML & "</row>"
sXML = sXML & "</variable>"

'close out the XML data string
sXML = sXML & "</data>"

'Now write the data out so that it gets
returned
```

```
Response.Write(sXML)

'Cleanup connection vars
oRst.close
oRst = Nothing
oCmd = Nothing
oCon.close
oCon = Nothing

%>
```

The sections of code related to Receiving data from the XML Data component have been grayed out.

Using Collaboration

The Xcelsius Professional Edition provides tools for you to quickly create **collaborative applications**. With only a few steps, you can setup your applications to allow multiple users to save and load application states to a central source, or even share and present data with each other in **real-time**.

For example, results of what-if analysis can be saved and shared across the globe by configuring collaboration and adding a Remote Scenario Component to your model. Live, online meetings and presentations are also possible with the real-time collaboration feature.

Note. This functionality is only available in the Professional Edition of Xcelsius.

Note. Imported SWF files within Xcelsius models will not have collaboration functionality unless explicitly designed to do so.

Configuring the Flash Communication Server

In order for your Xcelsius generated applications to take advantage of the collaboration features, a Macromedia Flash Communication Server first needs to be installed and configured properly. This **one** server can be used for any number of collaborative applications you create so long as the Flash Communication Server license permits.

A free developer version of the Flash Communication Server is available for evaluation via the Xcelsius help file. Consult the Flash Communication Server documentation for details on how to install.

Please note that by default the Flash Communication Server is configured to communicate through port 1935 using Real-Time Messaging Protocol (RTMP). If a firewall that blocks either port 1935 or RTMP protocol exists between the Flash Communication Server and the Xcelsius model, the server can be configured to allow communication over different ports and/or over HTTP for collaboration to work properly. Please refer to the Flash Communication Server documentation and the online article from Macromedia regarding Tunneling Macromedia Flash Communications through Firewalls and Proxy Servers for more information.

Once the server has been installed, only a few additional scripts need to be added to the server installation to allow Xcelsius applications to collaborate. These files can be found in the **/developer/collaboration/server** directory of the Xcelsius installation.

- **IMComponents.asc** should be placed in the **/scriptlib** directory.
- **IMPeople.asc** should be placed in the **/scriptlib/components** directory.
- **IMUser.asc** should be placed in the **/scriplib/components** directory.

After you have completed these steps, you can begin creating server applications that your Xcelsius models can connect to.

Creating the Flash Communication Server Application

To create a Flash Communication Server application, first create an application folder under the /applications directory of the Flash Communication Server installation.

1. Locate the /applications directory of the Flash Communication Server installation.

2. Create a new subdirectory there with any valid directory name.

   The name you specify will become the name of your new application.

3. Create the script that the Flash Communication Server will execute by copying the **main.asc** template into the subdirectory you just created. This file can be found in the /developer/collaboration/server directory of your Xcelsius Installation

   If you don't want to restrict access to your server (not recommended for public servers), you're done. Otherwise continue to step 4.

4. To restrict access to your server application to only certain users, modify the myListener.onConnect() function of the main.asc file. This function is configured to receive a username and password as arguments. If the function returns true for the given username and password, the user is allowed to connect. If the function returns false, the user is **not** allowed to connect. The function must return a boolean for collaboration to work properly.

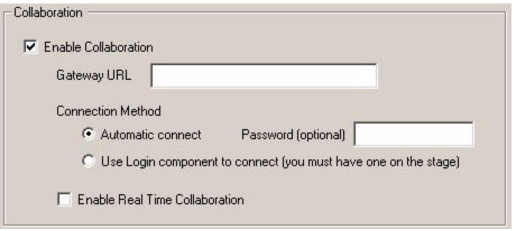
   Xcelsius models can connect to the Flash Communication Server in two ways:

   - Automatically
   - With the Login component

   If a connection attempt is initiated with the Login component, the values of the username and password arguments of the onConnect() function will correspond to the entries of the Login fields. If a connection attempt is initiated by the Automatic connection method, the value of the password argument will match the password specified in the Collaboration Options.

Creating Collaborative Applications with Xcelsius

Once the Flash Communication Server has been setup correctly, you can create collaborative Xcelsius models quickly and easily with the help of the Collaboration section of the Export Settings.



Collaboration

☑ Enable Collaboration

Gateway URL

Connection Method

● Automatic connect Password (optional)

○ Use Login component to connect (you must have one on the stage)

☐ Enable Real Time Collaboration

First, select the Enable Collaboration check box. Next, enter the URL of the Flash Communication Server that will communicate with the Xcelsius model. The **Gateway URL** is comprised of several elements which are described in detail below.

Protocol

The transfer protocol to be used for communications between the Xcelsius model and the Flash Communication Server. This should be set to “rtmp” unless a firewall that blocks RTMP protocol exists between the Flash Communication Server and the Xcelsius model. Otherwise, the protocol can be set to “rtmpt” or “rtmps” to tunnel communications through HTTP or HTTPS respectively.

- When using the protocol “rtmp”, the Xcelsius model will first attempt to connect to the Flash Communication server on port 1935 using RTMP. If this fails, it will attempt to connect to the server on port 443 through RTMP. If this also fails, it will attempt to connect to the server on port 80 through RTMP. If this also fails, it will make a last attempt to connect to the server on port 80 through HTTP.

- When using the protocol “rtmpt”, the model will attempt to connect on port 80 through HTTP.
- When using the protocol “rtmps”, the model will attempt to connect on port 443 through HTTP.

If the Xcelsius model is configured to connect to the Flash Communication Server over HTTP protocol, the server itself must also be configured to allow transfer over that protocol.

Server Address (Optional)	If the Xcelsius model and the Flash Communication Server are running on the same machine, you can leave the server address blank and the model will assume you mean to use the server on the local machine. Typically, however, you will need to enter a server address. This is the DNS name or IP address of the Flash Communication Server, such as “www.infommersion.com” or “123.123.123.123”.
Application Name	The name of the application to connect to on the server. This application will control which users can connect to the server.
Port (Optional)	You can optionally specify a port that you want communication to travel over in case a firewall between the Xcelsius model and the Flash Communication Server blocks the default ports used for the different protocols listed above. Only one connection attempt will be made using the specified protocol and port. If the Xcelsius model is configured to connect to the Flash Communication Server on a specific port, the server itself must also be configured to allow transfer on that port.
Instance Name (Optional)	You can also optionally specify an instance name of the server application that you want the Xcelsius model to communicate with. Every instance of a server application shares the same server script and validates the same users, but each instance stores data separately. Although Xcelsius models already use a unique key to prevent collisions between models, specifying an instance name can ease server management. If no instance

name is specified, the Xcelsius model connects to the default instance of the application, “_definst_”.

Gateway URL

The form of the Gateway URL is: “**PROTOCOL:[//SERVER_ADDRESS][:PORT]/APPLICATION_NAME[/INSTANCE_NAME]**” **-** with brackets [ ] denoting optional parameters.

Several examples of valid Gateway URLs are listed below.

- rtmp://www.infommersion.com/application1
- rtmpt://www.infommersion.com/application1
- rtmp://123.123.123.123/application1
- rtmp://www.infommersion.com:8080/application1
- rtmp://www.infommersion.com/application1/instance1

Consult your Flash Communication Server administrator for more information on what Gateway URL to use for your specific configuration and needs.

Unique Key

In order to keep different Xcelsius models from interfering with each other when collaborating, each model is generated with a unique key that is used to differentiate it from other models. This allows you to tie several models to one Gateway URL without them interfering with each other. Be aware that re-generating the model will change the key and the new application will not collaborate with older models.

Connection

Applications you generate with Xcelsius can connect to the Flash Communication Server in two ways:

- automatically, once it is started
- at users' requests with the Login component.

Select the **Connection Method** option that best suits your needs.

When using the Automatic connection method, you can choose to have a **Password** sent to the Flash Communication Server. The Flash Communication Server script can check this password to determine whether or not to allow the connection. The password is always received as the third argument to the script.

Be aware that the password you specify will be embedded in the .SWF application you generate. Persons with access to this .SWF will be able to extract this password. For more information on security, please refer to the Flash Communication Server documentation.

If you're looking to create a model that lets multiple users save and load shared scenarios, simply drop a Remote Scenario Component on the stage.

Select the **Enable Real Time Collaboration** to cause the generated application to collaborate its state in real-time between connected users. Changes made to the model by one user of the application will be seen almost instantly by all other connected users. The delay will depend on the speed of your internet connection, your license of Flash Communication Server, and the complexity of the model.

Note. Imported SWF files within Xcelsius models will not have collaboration functionality unless explicitly designed to do so.

Using the Remote Scenario Component

The Remote Scenario component lets users save the current state of a model, making it well-suited for saving results of what-if analyses. Users can save any number of these results or scenarios and load them at any time, even after closing the model. Since the scenarios are saved to a remote server, the Remote Scenario Buttons provide a simple and powerful way to share results with authorized users across the globe.

The scenarios created are specific to each model. As such, two models can have scenarios with the same names without interfering with one another.

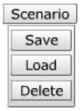
Scenarios saved in preview mode will not persist outside of the preview session. This includes exporting and snapshots to PowerPoint or to Outlook.

Note. This functionality is only available in the Professional Edition of Xcelsius.

How Does It Work?

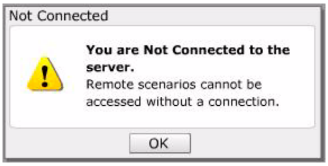
To enable users to save, load, and delete remote scenarios, first configure the model for collaboration and then simply add a Remote Scenario component to the model.

When running the model, users can press the Scenario component to bring up the three option buttons for the scenarios: Save, Load, and Delete.



After one of the three options is chosen, a standard file dialog will appear if the model is connected to the collaboration server, allowing the user to complete the operation.

If the model is not connected, the component will alert the user that the remote scenarios are inaccessible.


Not Connected

You are Not Connected to the server.
Remote scenarios cannot be accessed without a connection.

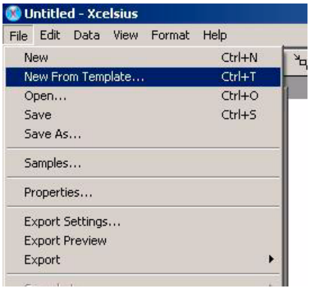
Loading a saved scenario should restore the model to almost exactly the same state it was in when it was saved. There are a few exceptions which don't directly affect the data model, such as cosmetic changes like if a Combo Box was opened/ closed upon save. The states of external SWF files are also not restored when a scenario is loaded.

Creating Templates

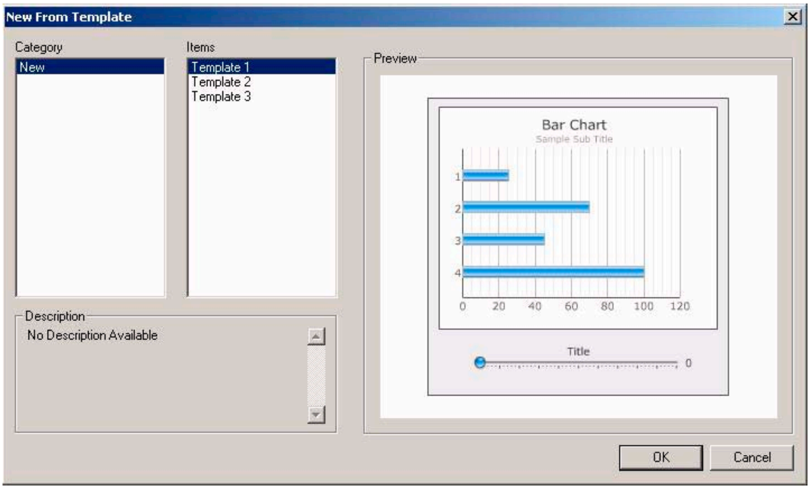
This section describes Xcelsius Templates. Xcelsius offers a set of state-of-the-art templates that you can use to create a new model. Templates are an excellent and efficient way to create a model since its design and look have been proven. You can use the existing Xcelsius templates, or you can create a model from scratch and save it as a template. As you may have experienced with similar applications, Power Point for example, sometimes the most difficult part of creating a presentation is to find the best combination of font sizes, colors, elements, and general layout. This difficulty is easily overcome when you have a library of templates with a broad spectrum of possibilities so that you can choose the one that better fits your needs.

Opening Templates

1. On the **File** menu, click **New From Template**.



When you select the **New From Template** option, you are presented with a list of available libraries. Each library contains a group of templates which are displayed under the Items section. As you select each template in the list, a preview of the template is shown on the right side of the screen. These are *live, interactive* templates; you can click on any of them to see the intended functionality, entry effects and any other features.



No Description Available

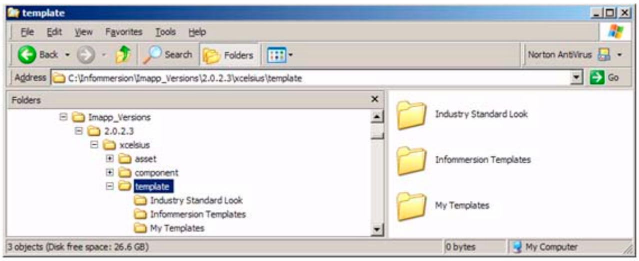
2. When you see a Template that fits your needs, click **OK**.

   The template is inserted in the canvas area as a new model. You can now add, delete or modify the template, and then save it as a new model or as a new modified-template.

Custom-Made Libraries and Templates

With Xcelsius, you can create your own libraries and templates. For example, if you are creating a set of Portlets for use in your corporate portal, you may want to save your models as templates so that you can re-use them to save time and maintain corporate standards. You can create as many libraries and templates as required.

To create a new library, simply create a new folder under the **/template** directory of the Xcelsius installation. By default, Xcelsius is installed to the **Program Files/Infommersion** directory.



Address: C:\Infommersion\Imapp_Versions\2.0.2.3\xcelsius\template

- Imapp_Versions
  - 2.0.2.3
    - xcelsius
      - asset
      - component
      - template
        - Industry Standard Look
        - Infommersion Templates
        - My Templates

3 objects (Disk free space: 26.6 GB) 0 bytes

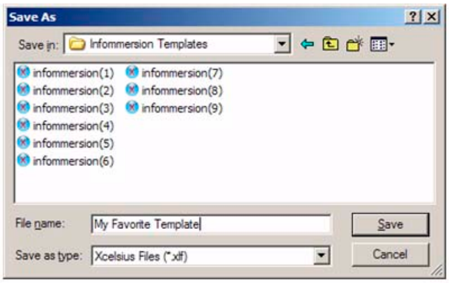
To create a new template, first design the model you want to use as the template, and then save that model's .xlf and .swf file in the appropriate library folder:

1. On the File menu, click Save As.

2. Browse and select the folder of the library in which you want to save the template.

3. Enter a file name. This will become the name of the template you create.

4. Click **Save**.



Save in: Infommersion Templates

infommersion(1)
infommersion(2)
infommersion(3)
infommersion(4)
infommersion(5)
infommersion(6)
infommersion(7)
infommersion(8)
infommersion(9)

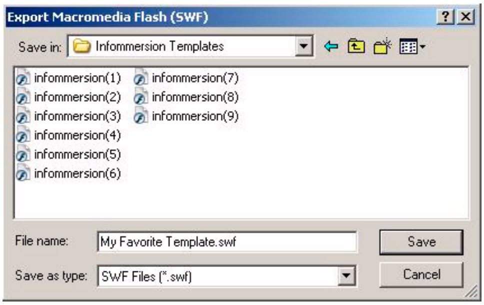
File name: My Favorite Template
Save as type: Xcelsius Files (*.xlf)

5. On the **File** menu, click **Export** and select **Macromedia Flash (SWF)**.

6. Browse and select the same folder as above.

7. Enter the same name, excluding the extension, as the model you saved above.

8. Export the model to the folder by pressing **Save**. This creates the template preview that will be displayed in the Preview section of the Templates window.



File name: My Favorite Template.swf

Save as type: SWF Files (*.swf)

Your model is now available as a template. The next time that you open the templates window, you will be able to preview and use your template.

Why Is This Important?

In our experience as business consultants, we know how time consuming it is to create a well-presented model or slide. It is not the level of difficulty that is challenging; it is the time that it takes away from more rewarding and value-added activities. We encourage the use of our templates so that you can focus on adding value to the numbers and the simulation itself.

Of course, if you create a nice looking model (and you will), you can save it as a template. We even would like to see it, so if you have a nice looking model send us a copy at Support@Infommersion.com. We will discuss it with you and may include it in one of our future releases.

Using Global Styles

Global Styles are a set of appearance parameters that allow you to change the default visuals of new components. You can also apply Global Styles to existing models to change their overall appearance. Style parameters are broken up into four major categories:

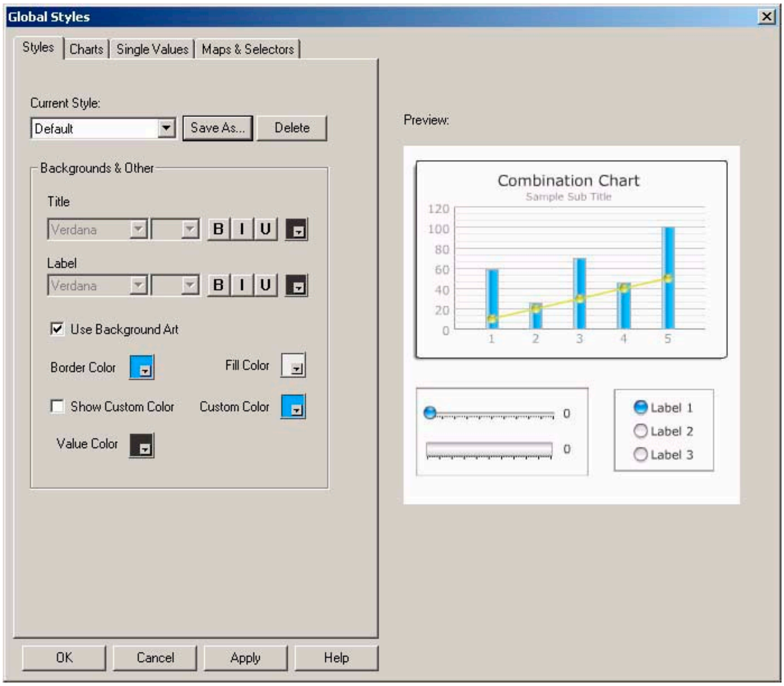
- Backgrounds & Others
- Charts
- Single Values
- Maps & Selectors.

Components that fall under the same category will share the same style defaults. These category defaults, when taken together, creates the “global” style. These parameters consist of color, font style, and custom art defaults.

Note. Global Styles are not transferred with Xcelsius authoring files (XLFs). Opening an XLF does not load the Global Style used in the XLF into the machine it is opened on. If the Global Style used by an XLF is unavailable, the style will continue to be used by the existing components in the model, but it will not be able to be applied to new components. Please refer to the Transferring Global Styles section of the Users Guide for information on how to copy Global Styles from one computer to another.

Changing the Current Global Style

To change the current Global Style, open the Change Style dialog under the View options. When Xcelsius is first opened, “Default” is always the current Global Style.

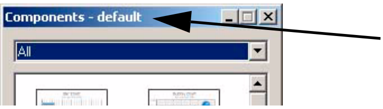


Current Style: Default

☑ Use Background Art

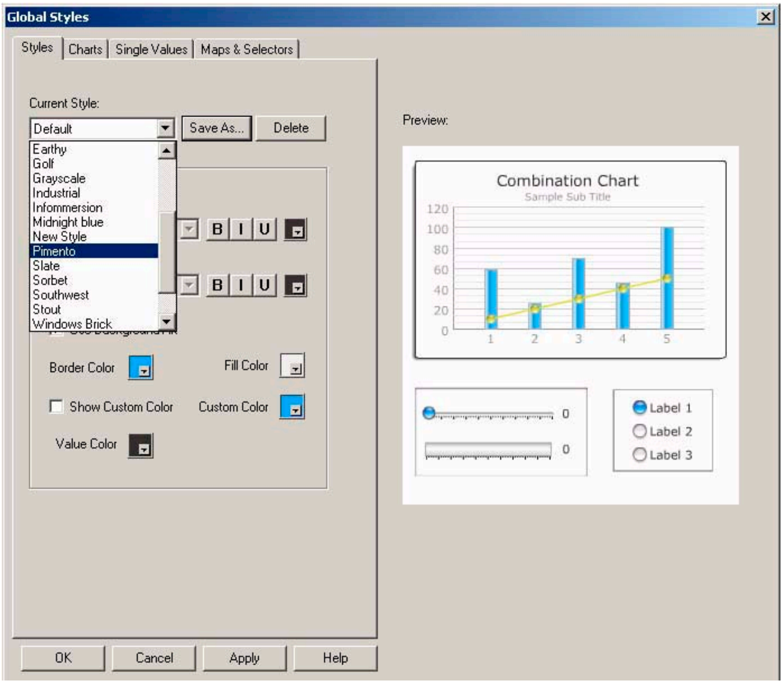
☐ Show Custom Color

The current style is indicated on the title bar of the Components Dialog Window.

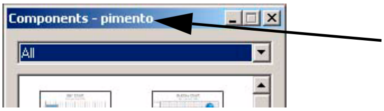


Current Style

To change the current style, select a style from the **Current Style** list box on the Global Style dialog then click on **OK**.



In this case, the current style has now changed from “default” to “pimento”. The current style can be confirmed on the title bar of the Components Dialog Window. Any component you place on the stage from this point on will take on the Global Style parameters of pimento.



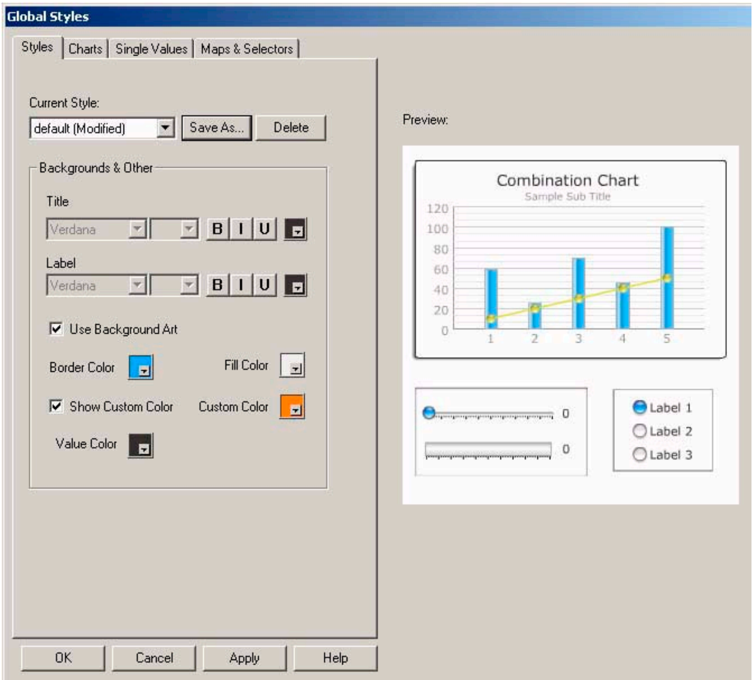
Current
Style

Creating a Global Style

A Global Style is created when you modify the style parameters to your preference (usually but not necessarily defined around a certain color theme), then saved into a style.

As a simple example, we will create a Global Style where we change the predominant marker color to orange.

To begin, change the **Custom Color** on the Backgrounds & Others section on the first tab or orange. Click on the color box for **Custom Color** and select a shade of orange from the palette. **Custom Color** controls the initial color of such components as the Trend Icon and Scenario Buttons. Now, click on **Show Custom Color** to enable the **Custom Color** that you just changed. Note that the initial style has been labeled as modified, which indicates unsaved changes have taken place.

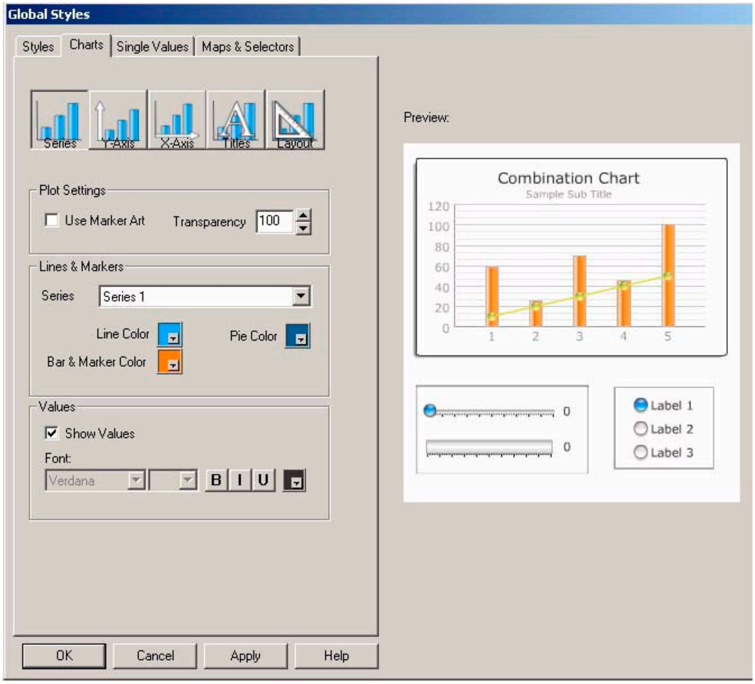


Current Style: default (Modified)

☑ Use Background Art

☑ Show Custom Color

The next step is to modify the **Bar & Line** color on the Charts tab. Notice that in the Preview window, the chart bar color has changed to reflect your color modification. In this case, Series 1 has been changed. The line markers have not changed because they are set with Series 2 colors. Changing successive series colors is accomplished by selecting a series to modify with the **Series** list box.

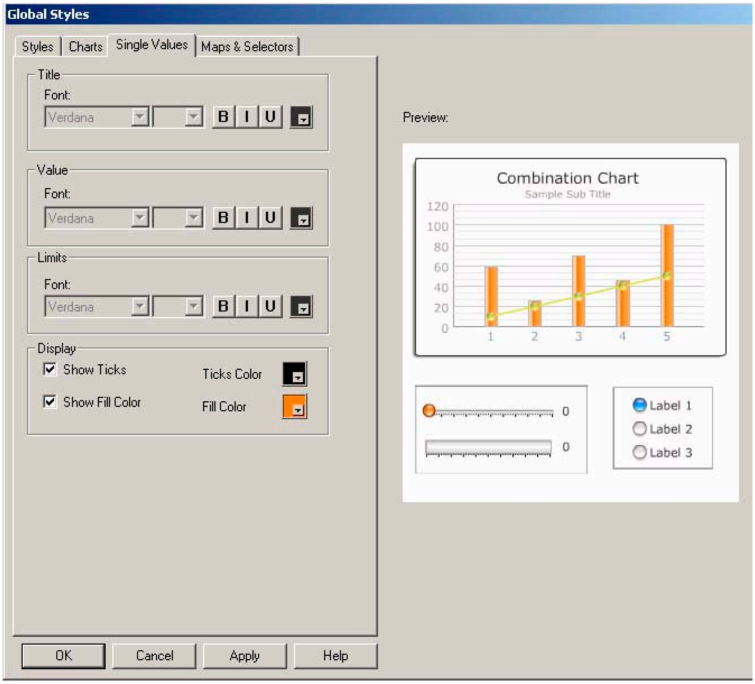

Global Styles

Plot Settings
☐ Use Marker Art Transparency 100

Lines & Markers
Series: Series 1

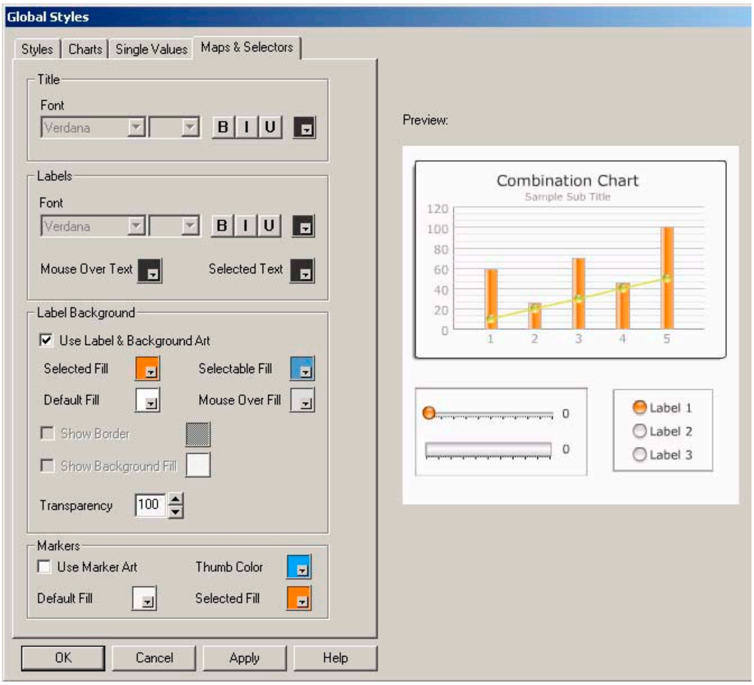
Values
☑ Show Values
Font: Verdana

Switch to the Single Values tab, change **Fill Color** to the match the orange of the other categories. Now click on **Show Fill Color**. By enabling **Show Fill Color**, the custom Fill Color that was modified will be enabled for display. At this point, the Single Value components on the Preview window have their new colors.



The next step is changing the Maps & Selectors **Selected Fill** color. There are two Selector color parameters that are labeled as **Selected Fill**. Under the Label Background subsection, Selected Fill refers to the color of the currently selected region in Selectors such as the Menu and List Box. In the Markers subsection, Selected Fill is the color of the currently selected item marker in a Selector, such as in a Radio Button or Push Button component. For markers

Selected Fill to be displayed, **Use Marker Art** must be disabled.



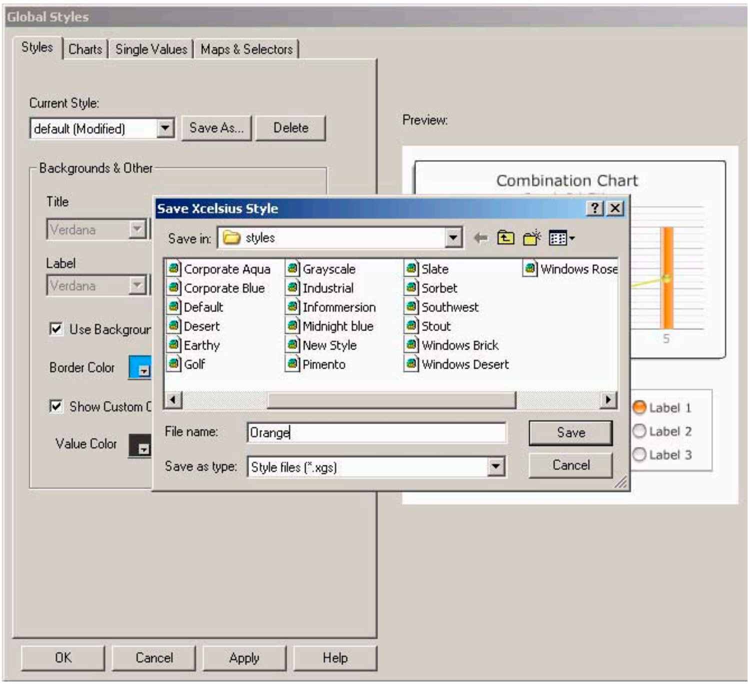
Title
Font: Verdana

Labels
Font: Verdana
Mouse Over Text
Selected Text

Label Background
☑ Use Label & Background Art
Selected Fill
Selectable Fill
Default Fill
Mouse Over Fill
☐ Show Border
☐ Show Background Fill
Transparency: 100

Markers
☐ Use Marker Art
Thumb Color
Default Fill
Selected Fill

The final step is saving the newly created style. Although the modified style can be now be used as-is, by either setting it as the Current Style by clicking **OK**, or by applying it to the components on the canvas with **Apply**, saving it as a new, individual style file will ensure future use. On the primary Styles tab, click on the **Save As** button to invoke the Save File Dialog. With the Save File Dialog, the new style can be named and saved to the default Styles directory, or to any directory of choice. After the style is saved, it becomes available from the **Styles** list box, if it has been saved to the default Styles directory. If the new style has been saved to a different directory, the style can be accessed by selecting **browse...** from the Styles list box.



Current Style: default (Modified)

File name: Orange

Save as type: Style files (*.xgs)

This style is a very simple example of how changing one of the primary display colors for all components can create fresh and alternate visuals from the default component appearance settings. By taking advantage of more Global Style parameters, such as changing font style or enabling borders and colors for example, alternate new looks can be obtained for your Xcelsius presentations and reports.

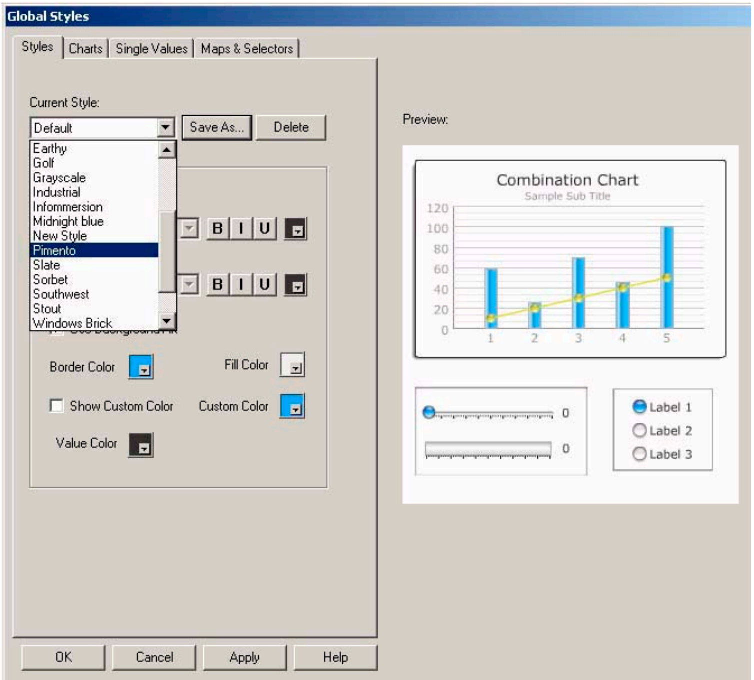
Using Global Styles

Global Styles can be used in two ways.

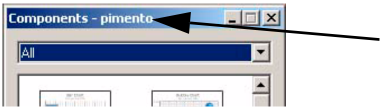
- Setting the Current Style for new components.
- Applying a Style to an existing model.

Setting the Current Style

To change the current Global Style, open the Change Style dialog under the View options. When Xcelsius is opened, “Default” is always the current Global Style. To change the current style, select a style from the **Current Style** list box on the Global Style dialog then click on **OK**.



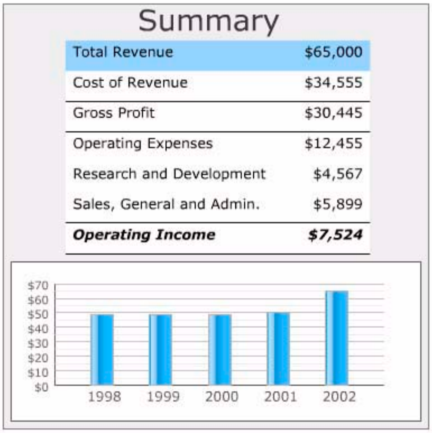
In this case, the current style has now changed from default to pimento. The current style can be confirmed on the title bar of the Components Dialog Window. Any component you place on the stage from this point on will take on the Global Style parameters of pimento.



Current Style

Applying a Style

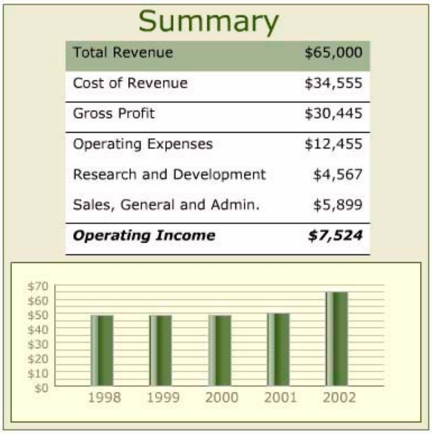
A style can also be applied to an existing model. As an example, open **File|Samples|Intermediate|Sample 1**.



Summary

Total Revenue	$65,000
Cost of Revenue	$34,555
Gross Profit	$30,445
Operating Expenses	$12,455
Research and Development	$4,567
Sales, General and Admin.	$5,899
Operating Income	***$7,524***

Open the Global Styles dialog under **View**. Change the **Styles** list box to 'Earthy'. Now click **Apply**. Note how the model has greatly changed appearance.



Summary

Total Revenue	$65,000
Cost of Revenue	$34,555
Gross Profit	$30,445
Operating Expenses	$12,455
Research and Development	$4,567
Sales, General and Admin.	$5,899
Operating Income	***$7,524***

This is an example of how the visuals for an existing model can be changed, quickly and easily, without manually changing the properties of each component.

6

Chapter 6:
Publishing Models

This chapter contains the following sections:

Taking a Snapshot of Your Model . . . . page 232
Exporting Your Model to Flash. . . . . page 233
Exporting Your Model to HTML. . . . . page 233
Exporting Your Model to PowerPoint . . . . page 234
E-mailing Your Model with Outlook . . . . page 236
Delivering Your Model to a Plumtree Portal . . . . page 238

Taking a Snapshot of Your Model

The snapshot feature allows you to make changes to your model and export these changes to Microsoft Excel, Macromedia Flash (SWF), HTML, Microsoft PowerPoint, or Microsoft Outlook.

In order to enable the snapshot feature, you must be in preview mode. Once in preview mode, the Snapshot submenu will be enabled on the File menu. The Snapshot menu items allow you to export the current preview data using one of the following methods:

- **Back To Excel**
  This feature will save to a new Microsoft Excel file the contents of the imported Microsoft Excel file plus the changes that were made in preview mode. This option is disabled until a Microsoft Excel file has been selected using Import Model.

  This feature will allow you to use Xcelsius as an analytical tool and still allow you to save the results of your analysis back to Excel. See “Exporting Your Model to Flash” on page 233 for more information.

- **Macromedia Flash (SWF)**
  This feature will allow you to generate a Macromedia Flash (SWF) file with the changes made in preview mode. See “Exporting Your Model to Flash” on page 233 for more information.
- **HTML**
  This feature will generate a HTML file and a Macromedia Flash (SWF) with the changes made in preview mode. See “Exporting Your Model to HTML” on page 233 for more information.
- **PowerPoint slide**
  This feature will generate a Microsoft PowerPoint file with one slide that contains a Macromedia Flash (SWF) file with the changes made in preview mode. See “Exporting Your Model to PowerPoint” on page 234 for more information.

- **Outlook**
  This feature will generate a Microsoft Outlook email that contains the Macromedia
  Flash (SWF) file with the changes made in preview mode. See “E-mailing Your Model with Outlook” on page 236 for more information.

Exporting Your Model to Flash

Once you have built and previewed your model, you can use Xcelsius to publish your content as a Macromedia Flash (SWF) file. After publishing, the SWF file can be executed locally with the standalone Flash player, opened in a browser, used as part of a web site, or imported into a number of different programs.

How to Export

1. From the **File** menu, click on **Export**, and then select **Macromedia Flash (SWF)**.
2. Enter a **File name** and press **Save**.

Xcelsius will generate the Macromedia Flash file you specified. If there are any non-embedded external files in the model, a folder containing those files is also generated with the same name and location as the exported file. The model will load the external files from this directory at runtime. The model and folder must exist in the same directory for the external files to be loaded correctly.

Exporting Your Model to HTML

Almost all browsers are capable of playing Macromedia Flash files (SWFs). Not all computers, however, are configured to open Flash files in the browser. By embedding your SWF model in an HTML file, you can ensure that your users will be able to view the model simply by double-clicking on one file - since virtually all computers are configured to open HTML files in a browser. Once you have built and previewed your model, you can accomplish this using the Export to HTML option. This option generates an HTML document that references your SWF model automatically.

How to Export

1. From the **File** menu, click on **Export**, then select **HTML**.
2. Enter a **File name** and press **Save**.

Xcelsius will generate the HTML file you specified **and** a SWF file in the same directory with the same name as the HTML file. Note that both of these files must be kept together in order for the HTML file to work properly.

Exporting Your Model to PowerPoint

After you create your model, you can send it directly to a PowerPoint slide. You can then modify the slide using PowerPoint's tools just as you would any PowerPoint slide.

To **preview** your model in PowerPoint, click on the toolbar.

This launches PowerPoint and inserts your model into a new slide. The model inserted into PowerPoint is actually the dynamic model.

Note. Non-embedded external files used by backgrounds will not be available in the preview presentation.

How to Export

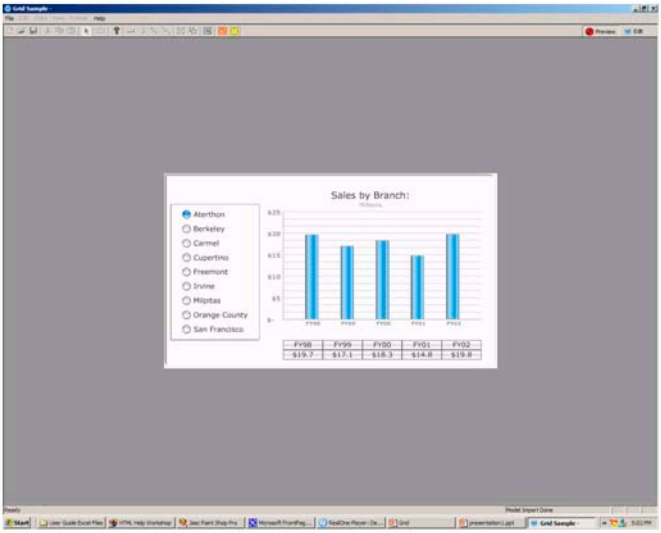
1. On the **File** menu, click **Export** and choose the **PowerPoint** option.
2. Enter a **File name** and press **Save**.

Xcelsius will generate the PowerPoint (PPT) file you specified. In addition, a Macromedia Flash movie (SWF) with the same file name is also created. If there are any non-embedded files in the model, a folder containing those files is also generated. It, too, is created with the same name as the PowerPoint file.

The generated PowerPoint file is automatically opened and the model will be visible on the first slide of the presentation. The model will have all of its interactivity and functionality when the presentation is run.

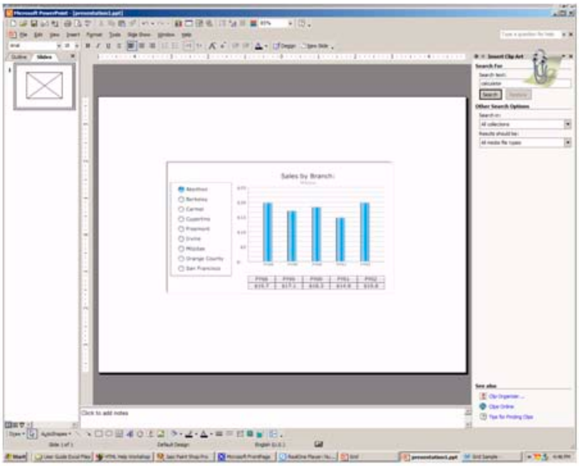
Note. If the model contains any backgrounds with **non-embedded external files**, the folder containing those files must be in the same directory as your PowerPoint presentation. When the model is exported using the File menu, Xcelsius automatically creates this folder with the same name and location as the exported model. When the PowerPoint preview button from the Toolbar is used, this folder is **not** created. If the PowerPoint presentation is moved, the folder of external files must also be moved for the model to work properly.

Example Assume you created the following model:



FY98	FY99	FY00	FY01	FY02
$19.7	$17.1	$18.3	$14.8	$19.8

Now, you are ready to publish it using PowerPoint. Click the icon to export the model to PowerPoint.



Now, you can add titles and other PowerPoint features to your model. Remember, this is actually your dynamic model.

E-mailing Your Model with Outlook

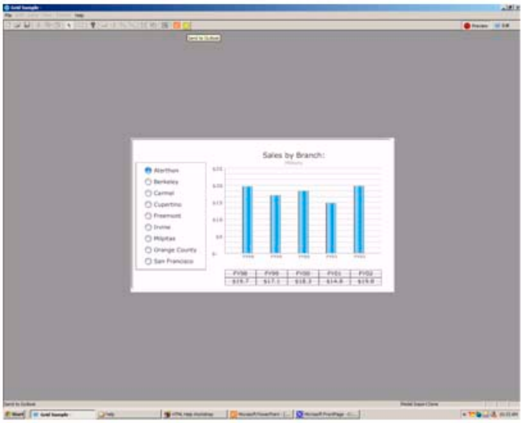
After you create a model, you can publish it using Microsoft Outlook. There are two ways to publish a model to Outlook:

- Click the icon.
- On the File menu, click Export and select the Outlook option

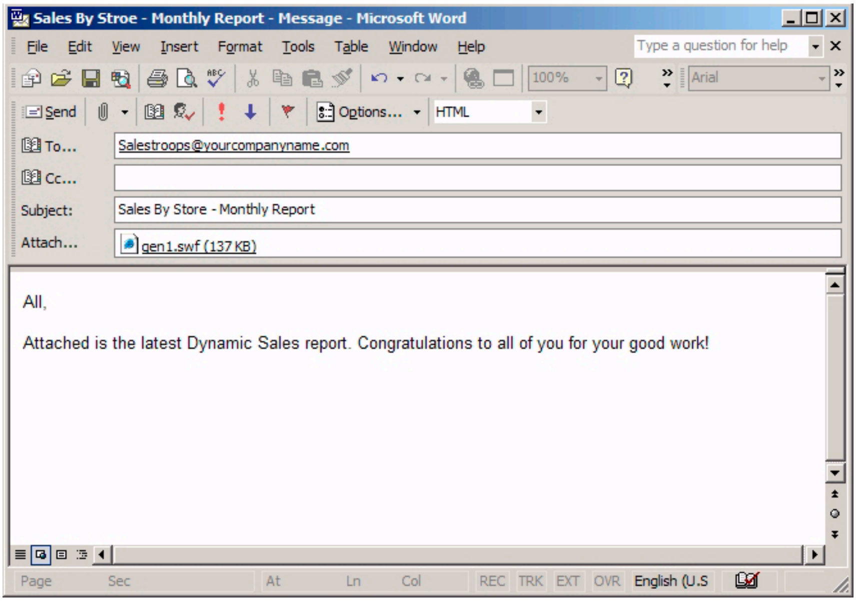
Either method launches Outlook and attaches the model to a blank email message. You can then type your email, select your recipients, and send the email.

Example

1. After viewing a preview of your model, click the Outlook icon.



Xcelsius automatically launches Outlook and attaches the model to an empty email.



To... Salestroops@yourcompanyname.com

Cc...

Subject: Sales By Store - Monthly Report

Attach... gen1.swf (137 KB)

All,

Attached is the latest Dynamic Sales report. Congratulations to all of you for your good work!

2. Type your e-mail text, select your recipients, and send your email.

Delivering Your Model to a Plumtree Portal

You can add powerful and engaging content to your Plumtree portal by adding an Xcelsius model. All of the interactivity and functionality of your model is retained in the portal.

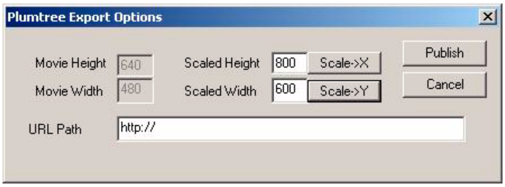
How to Export

1. Export the model to Macromedia Flash (SWF). See "Exporting Your Model to Flash" on page 233.

2. Place the exported model on your web server.

3. From the **File** menu, click on **Export**, and then select **Plumtree**.

   The Plumtree Export Options dialog will open.



Plumtree Export Options

Movie Height 640

Movie Width 480

Scaled Height 800

Scaled Width 600

URL Path http://

   To make it easier to add your Xcelsius model into an existing Plumtree portal, you can quickly enter the size that you want your model to be in your portal using the **Scaled Height** and **Scaled Width** parameters.

   In order to maintain the proportions of your original model, we suggest using the **Scale->X** and **Scale->Y** buttons. These buttons use either the Scaled Width or Scaled Height parameter to calculate the other dimension (Scaled Height or Scaled Width respectively). This feature allows you to easily fit your model into a certain area of your Plumtree portal.

   For example, if you know that the model needs to be placed in a 600 pixel wide column, you can enter 600 into the Scaled Width parameter and press the Scale->Y button to set the model up so that it is as large as possible for that column while sill maintaining its proportions.

4. In the **URL Path** field, enter the URL of the model that you just placed on your web server.

5. After configuring the Plumtree Export Options, press **Publish**.

6. Enter a **File name** and press **Save**.

Xcelsius will generate an HTML file with the name specified that references the model at the URL path that was entered in the Plumtree Export Options. By creating a gadget from this HTML file, your Xcelsius model can be added directly into your Plumtree portal. Please refer to the Plumtree documentation for more information on creating gadgets and configuring portals.

Note. The Flash Movie (SWF) must be exported to the location you set in the URL path of the Plumtree Export Options. The HTML file must also have access to the movie.

7

Chapter 7: Frequently Asked Questions

This section contains questions frequently asked by Xcelsius users.

Do I need to install Macromedia Flash to run Xcelsius?

The Macromedia Flash player is required for Xcelsius to function properly. If you skipped this part of the install process, you can download and install Flash yourself from the Macromedia website here.

What Excel functions are supported by Xcelsius?

See “Chapter 10: Excel Functions” on page 499 of the Xcelsius Reference Guide (on your Xcelsius installation disk) for a complete list of functions.

Can I re-import an Excel file with a renamed sheet?

See “Re-Importing with Renamed Sheets” on page 49 for issues with renamed sheets.

What is the maximum limit of rows for a single spreadsheet selection?

There is no limit to the number of rows for a selection. However, the size of your selection can affect the performance of your model. Xcelsius will warn you if you select more than 512 rows.

Does Xcelsius support Excel files which link to other Excel files?

No, this feature is not supported by Xcelsius.

Why don’t my Excel macros work?

Xcelsius does not support macros in Excel spreadsheets at this time.

Why doesn't my component show scientific formatting?

The visual display of scientific formatted numbers is not supported at this time. Calculations that are dependent upon scientific formatted numbers are not affected.

How large can my Excel file be?

There is no limit to the size of an Excel spreadsheet that can be used in Xcelsius. There are a number of factors, however, which may affect the performance of your model. These include:

- the number of components you have on the stage
- the amount of data that is being changed during the simulation
- the complexity of the calculations being performed, and so forth.

The speed of the computer can also greatly affect performance, and should be kept in mind when developing models that will be distributed to other users.

Which non-standard characters are supported?

The following non-standard characters are supported at this time:

Ç
ü
é
â
ä
à
å
ç
ë
è
ï
î
ì
Ä
Å
É
æ
Æ
ô
ö
ò
û
ù
Ö
Ü
á
í
ó
ú
ñ
Ñ
ß
€

Which regional Excel formats does Xcelsius support?

Xcelsius automatically detects the regional formatting being used on your machine and adjusts its output appropriately.

For example, if your regional settings use the “/” for the date separator, the date January 2nd, 2004 would appear as “1/2/04” in your Xcelsius models. If your regional settings use the “-” for the date separator, the date would appear as “1-2-04” in the exported model. These settings can be found under the Regional and Language Options of the Windows Control Panel. The following items are automatically adjusted:

- decimal separator
- thousands separator
- general format name
- month
- day
- year
- hour
- minute
- second
- time separator
- date separator

Why doesn't Xcelsius work after I upgrade/install Microsoft Office?

When Xcelsius is installed, it automatically configures itself to work with the version of Microsoft Office that is installed. If you upgrade or change the version of Microsoft Office on your machine, Xcelsius must be re-installed to work properly with the new version.

Why does my Table look different than my Excel spreadsheet?

The Table component supports only the Verdana font. Your Excel spreadsheets may be using a different font which will result in minor visual differences between the spreadsheet and your tables. In order to match your views, change the spreadsheet font to Verdana.

Why doesn’t my URL button work?

Your URL needs to include http:// in order for it to function correctly.

What happened to the scenarios I saved?

If you are having trouble with saving and loading scenarios with the Scenario button, please refer to the Users Guide on Using the Scenario Component.

Why can't I drag my Slider, Dial, etc.?

The values of single value components that are linked to cells with formulas can not be adjusted in order to prevent inconsistencies in the model.

How do I change my Alert Target and Font colors?

The color bar controls which color is currently active for editing. You can then use the appropriate color buttons to edit the individual colors. Please see “How to Use Alerts” on page 164.

Why aren't my Dynamic Web Query models refreshing when running in Internet Explorer?

Internet Explorer has default cache settings that prevent Xcelsius models from refreshing properly. Please see “Internet Explorer Caching Issues” on page 190 for more information.

What happened to my cell formatting when I Replaced Data Selection?

Replace Data Selection does not change the cell format. Please see “Updating Data for a Model” on page 46 for more information.

How can I embed an Xcelsius model into an existing PowerPoint presentation?

Within Xcelsius you can embed your current model into a new PowerPoint presentation with only a few clicks using the Export to PowerPoint options (see “Exporting Your Model to PowerPoint” on page 234). To embed the model into an existing PowerPoint presentation, simply export, copy the model from the new PowerPoint presentation, and paste it into your existing presentation. If your model contains any external files which aren't embedded into the model, you will also need to copy the folder containing those files into the same directory as your PowerPoint presentation. When the model is exported, this folder is created with the same name and location as the exported model.

How can I add external images or artwork to my model?

You can import JPEG images using any of the Background components. Simply check the Use External File checkbox on the General tab of the Background properties window and import your file. You can even use this feature to import entire Flash movies into your model. Please see “Using Backgrounds Components” on page 130 for more information.

Why won't my model print correctly?

Printing your model through the Menu of the Flash Player doesn't work since the Flash Player does not print transparent objects properly. Printing through the browser may also print the model with incorrect proportions. To correctly print your model, first take a screen shot using Ctrl+PrintScreen (entire screen) or Alt+PrintScreen (focused window only). Paste the screen shot into an image program and print through that program's options

Why do I get a “Server Busy” message?

This means that Excel has a pending operation or is busy performing an instruction. Check Excel to make sure it is not in the process of editing and then click Retry on the warning dialog.

Why do I get the message “A script in this movie is causing Flash Player to run slowly...”?

The Macromedia Flash Player used to view Xcelsius models will show this message whenever a script has taken more than 60 seconds. Due to the complexity of Xcelsius models, larger models running on slow machines may cause this message to be shown, particularly at startup. By continuing to press “No”, the model should load properly.

Note. While in Preview Mode, pressing “Yes” to abort the script will cause Preview to stop working. Xcelsius must be restarted.

Why does my model start in a strange state?

When a model is loaded, all selectors will insert their default selection data into their Insert In ranges to populate other components with data. When more than one selector inserts into the same range, the selector at the highest level will insert last, overriding the default data inserted by the other selectors. You can use the Object Browser to view the order of the components and change the order using the Layer Options.

Why aren't my data sources refreshing?

Certain data sources are denoted as static with a green Excel icon. These data sources do not refresh during the course of the model. Please see “Dynamic and Static Data Sources” on page 35.

Section

II

Reference Guide

In this section:

Chapter 8:
Component Reference . . . . page 251

Chapter 9:
Tool Reference . . . . page 479

Chapter 10:
Excel Functions. . . . . page 499

8

Chapter 8:
Component Reference

This chapter contains the following sections:

Backgrounds . . . . page 252
Charts. . . . . page 256
Selectors . . . . page 304
Single Values. . . . . page 373
Collaboration . . . . page 405
Maps . . . . .page 417
Other . . . . page 432

Backgrounds

Background

General

Use the Background Type options to select the visual display for the Background component.

There are three display options:

- **Background Art**
  Displays the default art for the selected component.

☐ Use Background Art

  Check Use Background Art to use the default art for the selected component. Selecting this option disables Use External File.

- **External File**
  Loads a user-specified file into the display area.

☐ Use External file (jpg or swf)

  Check Use External File to load an external file into the display area. Selecting this option enables the Import button and disables Use Background Art.

Import

  Use the Import button to display a file selection dialog box that lets you browse for an external file to import. The Show Background Color check box is enabled after a file has been selected for import.

Note. Multiply nested SWF within SWF files are not supported.

Check **Embed File** to embed the imported file into the exported model. The file will become a part of the exported model.

Leave this option un-checked to have the file loaded into the exported model at runtime. When the model is exported, all of the **non-embedded** external files used in the model are written out to a folder with the same name and location as the model. The model will load the external images or movies from this directory. The model and folder **must** exist in the same directory for the external files to be loaded correctly.

The decision on whether to embed the file or not will depend on your specific needs. The main advantages for embedding files are outlined below:

- Allows you to distribute your entire model in a single file
- Dynamic Visibility is faster since reload doesn't occur
- Maintains state when hidden with Dynamic Visibility

The main advantages for **not** embedding files are outlined below:

- Possible runtime performance increases since the external files are unloaded when they are hidden with Dynamic Visibility
- Shorter load time for application since external files are loaded only when necessary
- Model does not need to be re-exported if external file changes

☐ Show Background Color

Check Show Background Color to display the background color of the imported SWF. Leave this option un-checked for a transparent display area.

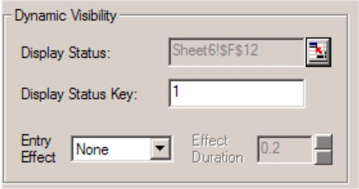
Note. This option applies only if an external SWF file has been imported.

Check **Capture Mouse Events** to prevent mouse events from passing through the background. This allows you to use the background to hide components and prevent users from interacting with them while they are hidden. Leave this option un-checked to allow mouse events to pass through the background. By allowing mouse events to pass through, the background could be placed above a button to create a custom look.

Note. An imported SWF file can still capture mouse events when this option is un-checked.

- **User Configured**
  If neither the Use Background Art or the Use External File options is selected, you can set the look of the component by configuring the appearance parameters on the Appearance tab of the component property sheet.

Behavior



Dynamic Visibility

Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.

- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration

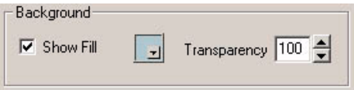
Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Appearance

Background



Background

☑ Show Fill

Transparency 100

Use the options in this section to configure the appearance of the background fill.

- **Show Fill**

  Select Show Fill to display the background fill.

- **Fill Color**

  Use this option to set the fill color of the background:

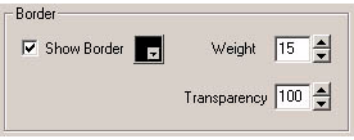
  1. Click the Fill Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

Note. This option is only available when Use Background Art is unselected.

- **Transparency**

Enter the desired fill transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).

Border Use the options in this section to configure the appearance of the border.



Border

☑ Show Border

Weight 15

Transparency 100

- **Show Border**

  Select Show Border to display a border around the background fill.

- **Border Color**

  Use this option to set the border color of the background.

  1. Click the **Border Color** box (shown in the margin) to display the Color dialog box.
  2. Select a color from the palette and click OK.

Note. This option is available only when **Use Background Art** is unselected.

- **Weight**

  Enter the desired Border Weight in pixels in the text box, or use the up/down arrows to adjust the value.

- **Transparency**

  Enter the desired transparency of the border in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).

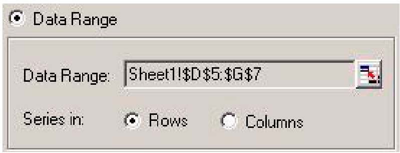
Charts

This section provides information about the controls available for Xcelsius charts. The common elements are discussed first, with unique chart elements listed by chart type at the end of the section.

General

Data Range

Use the options in this section to select a range of Excel data that contains all of the data for the selected chart.



● Data Range

Data Range: Sheet1!$D$5:$G$7

Series in: ● Rows ○ Columns

These options do not apply to the following chart types:

- Grids

Data Range option button

Click this option to enable the Data Range selection options.

Data Range selection

Use this option to select a range of data from the spreadsheet.

Rows

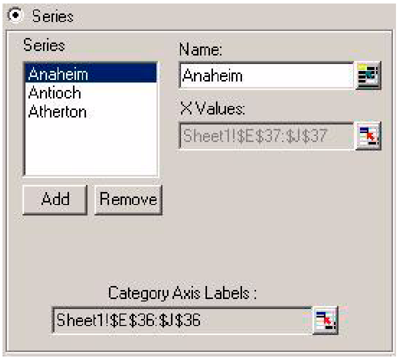
Click this option to indicate that the series information is contained in the rows of the selected range.

Columns

Click this option to indicate that the series information is contained in the columns of the selected range.

Series

Use the options in this section to edit individual series data for the selected component.



● Series

Series:
Anaheim
Antioch
Atherton

Name: Anaheim

X Values: Sheet1!$E$37:$J$37

Category Axis Labels : Sheet1!$E$36:$J$36

The Name and X Values parameters apply to the series name that is selected (indicated by a blue highlight) in the Series list box.

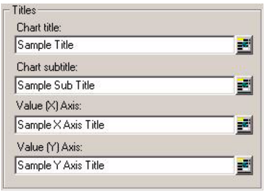
These options do not apply to the following chart types:

- Grid

Series option button	Check this button to enable the Series selection options.
Series list box	Select a series in the list box to edit the data for that series.
Add	Use the Add button to add a new series to the chart.
Remove	Use the Remove button to remove a series from the chart. The series that is selected (indicated by a blue highlight) in the Series list box will be removed.
Name text box	Use this option to manually enter the name for the selected series.
Name selection	Use this option to select the name for the selected series from the spreadsheet.
X Values	Use this option to select the x values for the selected series from the spreadsheet.
Category Axis labels	Use this option to select the category axis labels for the selected series from the spreadsheet.

Titles

Use the options in this section to set the various titles for the selected chart. You can manually enter the titles, or select them from the spreadsheet.



Titles

Chart title: Sample Title

Chart subtitle: Sample Sub Title

Value (X) Axis: Sample X Axis Title

Value (Y) Axis: Sample Y Axis Title

These options do not apply to the following chart types:

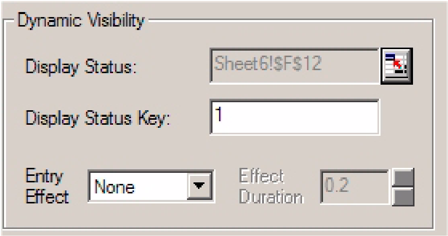
- Grids

Chart title text box	Set this option to manually enter the title for the component.
Chart title selection	Click this option to select the title from the spreadsheet.
Chart subtitle text box	Use this option to manually enter the subtitle for the component.
Chart subtitle selection	Click this option to select the subtitle from the spreadsheet.
Value (X) Axis text box	Use this option to manually enter the X-axis title for the component.
Value (X) Axis selection	Click this option to select the X-axis title from the spreadsheet.
Value (Y) Axis text box	Use this option to manually enter the Y-axis title for the component.
Value (Y) Axis selection	Click this option to select the Y-axis title from the spreadsheet.

X- and Y- axis settings do not apply to pie charts.

Behavior

Dynamic Visibility



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

All chart types support Dynamic Visibility.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration

Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Fixed Label Width

Use this option to optimize the performance of a chart used in a simulation. This option locks the width of the axes labels so they will not be resized if the scale changes. For example, an axis label of 100,000 appears as 100K when Fixed Label Width is enabled.

These options do not apply to the following chart types:

- Grids
- Pie

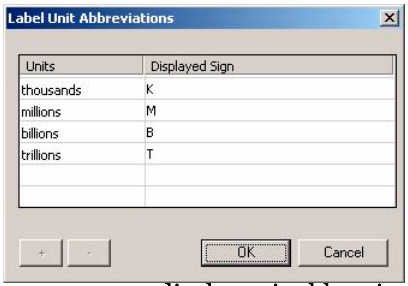
Fixed Label Width

Use the check box to enable the Fixed Label Width option for the selected chart.

Edit Label Unit Abbreviations

Use this option to display the Label Unit Abbreviations popup window.

Label Unit Abbreviations popup window

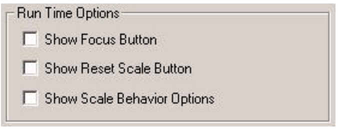


Units	Displayed Sign
thousands	K
millions	M
billions	B
trillions	T

With this popup, you can edit the unit abbreviations that appear on the axes labels when Fixed Label Width is enabled.

Run Time Options

The parameters in this section control the configuration options that appear on the chart in the generated SWF file. These options let you modify the “Scale Behavior” of charts at run time in the generated SWF file.


Run Time Options

☐ Show Focus Button

☐ Show Reset Scale Button

☐ Show Scale Behavior Options

These options do not apply to the following chart types:

- Grid
- Pie

Show Focus Button

Check the Show Focus Button to display the focus button (shown in the margin) on the run time configuration menu. Clicking on the focus button forces the chart to rescale the chart axes based on the current data.

Show Reset Scale Button

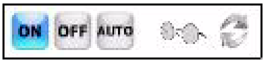
Check the Show Reset Scale Button to display the reset button (shown in the margin) on the run time configuration menu. Clicking on the reset button forces the chart to rescale the chart axes to the scale that the chart had when it first loaded.

Show Scale Behavior Options

Check the Show Scale Behavior Options to display the scale behavior options (shown in the margin) on the run time configuration menu. Clicking on the scale behavior options changes the scaling behavior of the chart; the chart axes will scale based on the new setting the next time the chart data changes.

- Clicking the On icon sets the scaling behavior to Auto Zoom Out
- Clicking the Off icon sets the scaling behavior to Manual Scale
- Clicking the Auto icon sets the scaling behavior to Auto Scale

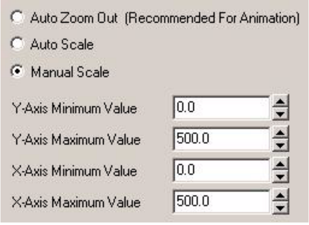
If one or more of the run time options are enabled, the run time icon (shown in the margin) appears on the chart in the generated SWF file.



When the pointer passes over the run time icon, all or part of the menu shown in the margin will appear, depending on the options enabled.

Scale Behavior

Use the options in this section to control how the chart axes scale as data changes.



○ Auto Zoom Out (Recommended For Animation)
○ Auto Scale
● Manual Scale

Y-Axis Minimum Value	0.0
Y-Axis Maximum Value	500.0
X-Axis Minimum Value	0.0
X-Axis Maximum Value	500.0

These options do not apply to the following chart types:

- Grid (see “Unique Grid Chart Elements” on page 289 for grid scale behavior settings)
- Pie

Auto Zoom Out

Select this option to set the scaling behavior to Auto Zoom Out. The axis scale will only grow as data changes, and not shrink. This option is recommended when a chart will be used in an animation. Setting the scale to Auto Zoom Out minimizes chart rescaling for improved performance.

Auto Scale

Select this option to set the scaling behavior to Auto Scale. The axis scale will grow and shrink as data changes.

Manual Scale

Select this option to set the scaling behavior to Manual Scale. The axis scale will not change as data changes. The minimum and maximum scale values are set at design time by the tool user.

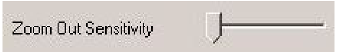
The Minimum and Maximum axes value text boxes are enabled only when Manual Scale is enabled. Moreover, they are enabled only for axes that are relevant to the selected component. For example, on a Line Chart, only the Y-axis text boxes are enabled because the X-axis displays category labels.

Axis Minimum and Maximum Values

Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Zoom Out Sensitivity

Use the Zoom Out Sensitivity parameter to tune the scaling behavior for the selected chart. The Zoom Out Sensitivity setting determines how much an axis scale will grow as the data changes.



Drag the slider to set the Zoom Out Sensitivity. To increase sensitivity, drag the slider to the right. Moving the slider to the extreme left results in the axis scale increasing by a small factor when the chart scale changes. Moving the slider to the extreme right results in the axis scale increasing by a large factor when the chart scale changes.

Note. This option is available only when the Scale Behavior option is set to Auto Zoom Out.

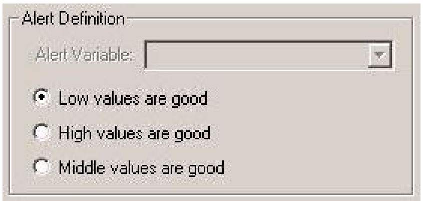
These options do not apply to the following chart types:

- Grid
- Pie

Alerts

Alert Definition

With this group of parameters, you can select one of three ways to calculate the visual indicator status or alert colors/levels. For multi-dimensional components like Bubble or XY Charts, you can also select the variable/axis used to determine the alert color.



Alert Definition

Alert Variable:

● Low values are good

○ High values are good

○ Middle values are good

Each method is based on a different way to measure the performance of the actual values against the target values. See “How to Use Alerts” on page 164 for more information.

These options do not apply to the following chart types:

- Pie

Alert Levels

You can use Alert levels to define the number of alert colors, the percentages or ranges for each color, and the type of color to be used on each level.

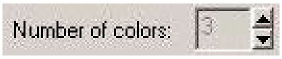
The colors are represented on the alert control panel depending on the selected alert method.

Each alert color has a range that is easily selected by moving the color picker slider on the color alert panel.

These options do not apply to the following chart types:

- Pie

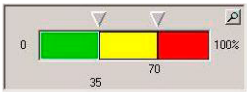
Number of colors



Number of colors: 3

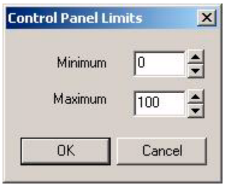
You can specify from two to 10 alert colors using the up/down arrows. New alert colors are added in gray to the left or right of the alert control panel, depending on the selected alert method.

Alert Colors



To adjust the percentages that trigger the alert colors, drag the gray arrows on top of the alert colors selector.

Control Panel Limits



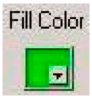
Control Panel Limits

Minimum: 0

Maximum: 100

To adjust the minimum and maximum percentage limits displayed on the alert colors selector, use the up/down arrows or type the required value.

Fill Color



You can change any alert color:

1. On the alert color selector, select the color to be changed by clicking on it.

2. Click the button shown in the margin to assign a new alert color to the selected range.

No Data

You can define the alert color that appears when any of the required values to calculate the alert color is missing. For example, if the target or actual value is missing for an alert level, the No Data color can appear instead of the color that was set using the Alert Color selector.

Enable Alerts

Use this option to activate a visual indicator of performance status for the selected component. This visual status uses customized colors. For example, Green might represent acceptable performance, while Red might indicate poor performance. Colors are generated by comparing actual values against target values.

You can customize alert levels, the number of colors, the type of colors, and specific alert features to provide the maximum amount of flexibility for each component.

☑ Enable Alerts

You cannot enable alerts on the following chart types:

- Pie

To enable alerts, check the Enable Alerts check box.

Target

With the Target text box you can set the target data used to trigger the alert colors. With the Target selection option, you can select a cell so that actual data can be compared to the selected target. In the grid component, the target applies to every grid item within it.

The target text box is available in the grid and all single value components that have the Alert tab enabled (dial, gauge, value, progress bars, and sliders). This option lets you manually enter the alert target value for the component.

This options does not apply to the following chart types:

- Grid (see “Unique Grid Chart Elements” on page 289 for grid alert target settings)

- Pie

The target selection button (shown in the margin) lets you select the alert target data from the spreadsheet.

Appearance

Series

Plot Settings

Each chart type requires unique plot settings. See the unique chart type settings, starting on page 280. Grids do not require plot settings.

Series Marker

Each chart type requires unique series marker (e.g., bar, bubble, etc.) settings. See the unique chart type settings, starting on page 280. Grids do not require series marker settings.

Values

Use the options in this section to configure the appearance of the value labels for the selected component. The value labels are displayed when the pointer passes over a value marker symbol.

These options do not apply to the following chart types:

- Bubble (see “Unique Bubble Chart Elements” on page 281 for bubble value settings)
- Grid (see “Unique Grid Chart Elements” on page 289 for grid value settings)
- XY (Scatter) (see “Unique XY (Scatter) Chart Elements” on page 302 for XY value settings

- **Show Values**

  Check this option to display value labels when the pointer passes over a marker symbol.

- **Font Settings**

  Use Font to configure the font used for the value labels. See the online help for more information about font settings.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The avail-

able formats are a subset of the format options available in Excel.

If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

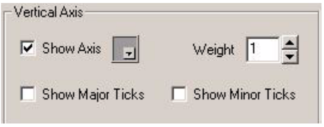
See the online help for more information about numeric settings.

Y-Axis

Grid and pie charts do not require Y-axis settings.

Vertical Axis

Use the options in this section to configure the appearance of the vertical axis.



Vertical Axis

☑ Show Axis

Weight 1

☐ Show Major Ticks ☐ Show Minor Ticks

- **Show Axis**

  Check this option to display the vertical axis for the selected chart. Un-checking this option disables all other options in this section.

- **Axis Color**

  Use this option to set the axis color.

  1. Click the Axis Color box to display the Color dialog box.

  2. Select a color from the palette and click OK to set the axis color.

- **Axis Weight**

  Axis Weight controls the width of the axis. Enter the desired weight in the text box, or use the up/down arrows to select a value from 1 to 100.

Note. The axis color and weight apply to the tick marks as well as the vertical axis.

- **Show Major Ticks**

  Check this option to display horizontal tick marks where the major grid lines intersect the vertical axis.

  Bar charts do not require ticks.

- **Show Minor Ticks**

  Check this option to display horizontal tick marks where the minor grid lines intersect the vertical axis.

  Bar charts do not require ticks.

Vertical Axis Labels

Use the options in this section to configure the appearance of the value labels displayed along the vertical axis.

- **Show Labels**

  Check this option to display value labels on the vertical axis. The value labels appear where the major grid lines intersect the vertical axis. Un-checking this option disables all other options in this section.

- **Font Settings**

  Use Font to configure the font for the value labels. See the online help for more information about font settings.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

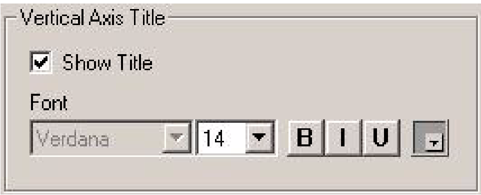
  If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

  See the online help for more information about numeric settings.

  Bar charts do not support numeric formatting on vertical axis labels.

Vertical Axis Title

Use the options in this section to configure the vertical axis title for the selected chart.



Vertical Axis Title

☑ Show Title

Font

Verdana 14

- **Show Title**

  Check this option to display the Vertical Axis Title on the selected chart. Un-checking this option disables all other options in this section.

- **Title Font Settings**

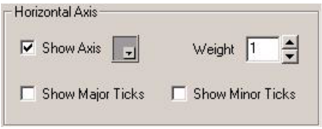
  Use Font to configure the font for the title. See the online help for more information about font settings.

X-Axis

Grid and pie charts do not require X-axis settings.

Horizontal Axis

Use the options in this section to configure the appearance of the horizontal axis.



Horizontal Axis

☑ Show Axis

Weight 1

☐ Show Major Ticks

☐ Show Minor Ticks

- **Show Axis**

  Check this option to display the horizontal axis for the selected chart. Un-checking this option disables all other options in this section.

- **Axis Color**

  Use this option to set the axis color.

  1. Click the Axis Color box to display the Color dialog box.

  2. Select a color from the palette and click OK to set the axis color.

- **Axis Weight**

  Axis Weight controls the width of the axis. Enter the desired weight in the text box, or use the up/down arrows to select a value from 1 to 100.

Note. The axis color and weight apply to the tick marks as well as the horizontal axis.

- **Show Major Ticks**

  Check this option to display vertical tick marks where the major grid lines intersect the horizontal axis.

  Column and line charts do not require ticks.

- **Show Minor Ticks**

  Check this option to display vertical tick marks where the minor grid lines intersect the horizontal axis.

  Column and line charts do not require ticks.

Horizontal Axis Labels

Use the options in this section to configure the appearance of the value labels that appear along the horizontal axis.

- **Show Labels**

  Check this option to display value labels on the horizontal axis. The value labels appear where the major grid lines intersect the horizontal axis. Un-checking this option disables all other options in this section.

- **Font Settings**

  Use Font to configure the font for the value labels. See the online help for more information about font settings.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

See the online help for more information about numeric settings.

Column and line charts do not support numeric formatting on horizontal axis labels.

Horizontal Axis Title

Use the options in this section to configure the horizontal axis title for the selected chart.

- **Show Title**

  Check this option to display the Horizontal Axis Title on the selected chart. Un-checking this option disables all other options in this section.

- **Title Font Settings**

  Use Font to configure the font for the title.See the online help for more information about font settings.

Titles

Grid charts do not require title settings.

Chart Title

Use the options in this section to configure the title area of the selected chart.

- **Show Title**

  Check this option to display the Title and Subtitle on the selected chart. Un-checking this option disables all other options in this section.

- **Title Font Settings**

  Use Title Font to configure the font for the title. See the online help for more information about font settings.

- **Subtitle Font Settings**

  Use Subtitle Font to configure the font for the Subtitle. See the online help for more information about font settings.

- **Alignment**

  Select the desired title alignment from the combo box. Choose from left, center, or right.

- **Show Border**

  Check this option to display a border around the title area.

- **Border Color**

  Use this option to set the border color.

  1. Click the Border Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **Border Weight**

  This parameter controls the width of the border. Enter the desired weight in the text box, or use the up/down arrows to select a value from 1 to 100.

- **Show Fill**

  Check this option to display a background with a solid fill color behind the title area.

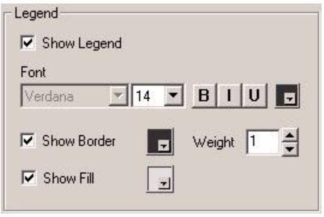
- **Fill Color**

  Use this option to set the background fill color.

  1. Click the Fill Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

Legend

Use the options in this section to configure the legend area of the selected chart.



Legend

☑ Show Legend

Font

Verdana 14 B I U

☑ Show Border Weight 1

☑ Show Fill

- **Show Legend**

  Check this option to display a legend on the selected chart. Un-checking this option disables all other options in this section.

- **Legend Font Settings**

  Use Font to configure the font for the legend. See the online help for more information about font settings.

- **Show Border**

  Check this option to display a border around the legend area.

- **Border Color**

  Check this option to set the border color.

  1. Click the Border Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **Border Weight**

  Use this option to display a background with a solid fill color behind the legend area.

- **Fill Color**

  Use this option to set the background fill color.

  1. Click the Fill Color box to display the Color dialog box.

2. Select a color from the palette and click OK.

Layout

Grid charts do not require layout settings.

Chart Area

Use the options in this section to configure the background and border appearance for the selected Chart component. If all three options are unselected, the chart appears without a border and without a background.

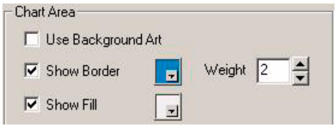


Chart Area

☐ Use Background Art

☑ Show Border

Weight 2

☑ Show Fill

- **Use Background Art**

  Check this option to use the default art for the background of the chart area. This option disables the border and fill parameters.

- **Show Border**

  Check this option to display a border around the chart area. This option disables the Use Background Art option and enables the Border Color and Weight options.

- **Border Color**

  Check this option to set the border color.

  1. Click the Border Color box to display the Color dialog box.

  2. Select a color from the palette and click OK.

- **Border Weight**

  Enter the desired weight in the text box, or use the up/down arrows to adjust the value. This parameter controls the width of the border. Valid values range from 1 to 100.

- **Show Fill**

  Check this option to display a background with a solid fill color behind the chart area. This option disables the Use Background Art option and enables the Fill Color option.

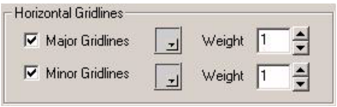
- **Fill Color**

  Use this option to set the background fill color.

  1. Click the Fill Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

Horizontal Gridlines

Use the options in this section to control the display of horizontal grid lines in the plot area of the selected chart.



Horizontal Gridlines

☑ Major Gridlines Weight 1

☑ Minor Gridlines Weight 1

Bar, stacked bar and pie charts do not require horizontal gridline settings.

- **Major Gridlines**

  Check this option to display major horizontal grid lines in the plot area of the selected chart. Un-checking this option disables the color and weight options for the major grid lines.

- **Major Gridlines Color**

  Use this option to set the color of the major grid lines.

  1. Click the Major Gridlines Color box to display the Color dialog box.
  2. Select a color from the palette and click OK to set the line color.

- **Major Gridlines Weight**

  Enter the desired weight of the Major Gridlines in the text box, or use the up/down arrows to adjust the value.

- **Minor Gridlines**

  Check this option to display minor horizontal grid lines in the plot area of the selected chart. Un-checking this option disables the color and weight options for the minor grid lines.

- **Minor Gridlines Color**

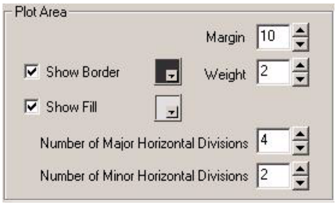
  Use this option to set the color of the minor grid lines.

  1. Click the Minor Gridlines Color box to display the Color dialog box.
  2. Select a color from the palette and click OK to set the line color.

- **Minor Gridlines Weight**

  Enter the desired weight of the Minor Gridlines in the text box, or use the up/down arrows to adjust the value.

Plot Area Use the options in this section to configure the plot area for the selected Chart component.



Plot Area

Margin 10

☑ Show Border

Weight 2

☑ Show Fill

Number of Major Horizontal Divisions 4

Number of Minor Horizontal Divisions 2

- **Margin**

  The Margin controls the amount of space between the outer edges of the plot area and the outer edges of the chart area. Enter the desired margin in the text box, or use the up/down arrows to adjust the value.

- **Show Border**

  Check this option to display a border around the plot area.

- **Border Color**

  Use this option to set the border color.

  1. Click the Border Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **Border Weight**

  Enter the desired Border Weight in the text box, or use the up/down arrows to select a value from 1 to 100.

- **Show Fill**

  Check this option to display a background with a solid fill color behind the plot area.

- **Fill Color**

  Use this option to set the background fill color.

  1. Click the Fill Color box to display the Color dialog box.

  2. Select a color from the palette and click OK.

- **Number of Major Vertical Divisions**

  Use this parameter to control the number of value labels displayed on the X axis. Enter the desired divisions in the text box, or use the up/down arrows to adjust the value.

  Pie charts do not require vertical division settings.

Note. X-axis value labels appear only at major line divisions. This option is available only when the Scale Behavior option is set to Manual.

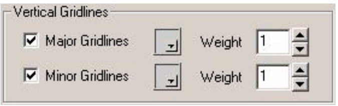
- **Number of Minor Vertical Divisions**

  Use this parameter to control the number of lines that appear between the major grid lines. Enter the desired divisions in the text box, or use the up/down arrows to adjust the value.

  Pie charts do not require vertical division settings.

Vertical Gridlines

Use the options in this section to control the display of vertical grid lines in the plot area of the selected chart.



Vertical Gridlines

☑ Major Gridlines Weight 1

☑ Minor Gridlines Weight 1

Column, combination, line, pie, and stacked column charts do not require vertical gridline settings.

- **Major Gridlines**

  Check this option to display major vertical grid lines in the plot area of the selected chart. Un-checking this option disables the color and weight options for the major grid lines.

- **Major Gridlines Color**

  Use this option to set the color of the major grid lines.

  1. Click the Major Gridlines Color box to display the Color dialog box.
  2. Select a color from the palette and click OK to set the line color.

- **Major Gridlines Weight**

  Enter the desired weight of the Major Gridlines in the text box, or use the up/down arrows to adjust the value.

- **Minor Gridlines**

  Check this option to display minor vertical grid lines in the plot area of the selected chart. Un-checking this option disables the color and weight options for the minor grid lines.

- **Minor Gridlines Color**

  Use this option to set the color of the minor grid lines.

  1. Click the Minor Gridlines Color box to display the Color dialog box.
  2. Select a color from the palette and click OK to set the line color.

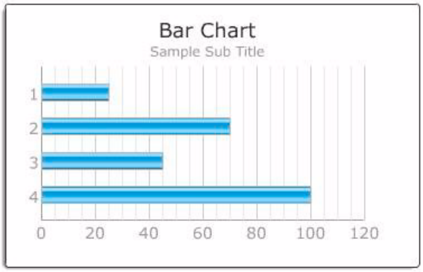
- **Minor Gridlines Weight**
  - Enter the desired weight of the Minor Gridlines in the text box, or use the up/down arrows to adjust the value.

Series

Sizes Use this option to select the size values for the selected series from the spreadsheet.

Unique Bar Chart Elements

A single- or multi-bar chart is ideal for showing and comparing one or more items over a period of time or in a specific range of values. You might, for example, use a Bar Chart in models that contain the quarterly headcount by region.



Most of the settings for bar charts are common. This section lists settings unique to bar charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  - **Use Bar Art**
    Check this option to use the default art for the bar markers. Checking this option disables the options in the Bars section.
  - **Transparency**
    This parameter controls the transparency of the bar markers. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value.

  Valid values range from 0 (completely transparent) to 100 (completely opaque).

  - **Bar Width**
    Enter the desired bar width in the text box, or use the up/down arrows to select a value from 1 to 100.

- **Bars**

  With the options in this section you can configure the appearance of the series markers for the selected chart.

  - **Series**
    Use Series to select the series to modify. The Bar Color option applies to the series that is currently selected in the combo box.
  - **Bar Color**
    Use Bar Color to set the bar color for the selected series.

    1. Click the Bar Color box (shown in the margin) to display the Color dialog box.

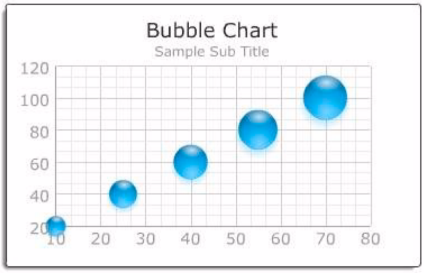
    2. Select a color from the palette and click OK to set the marker color.

Note. This option is available only when the Use Bar Art option is not currently selected in the Plot Settings section.

Unique Bubble Chart Elements

Despite its apparent complexity, the Bubble Chart is one of the most powerful analytic tools available. It lets you compare a group of items or series based on three different parameters. It has an X-axis and Y-axis to represent the item location over the chart area, and a Z value to represent the item size. You could, for example, use this chart to represent the stock market composition with the X-axis representing the ROI by industry type, the Y-axis representing the Cash

Flow, and the Z-axis representing the Market Value. You will be pleased with the results.



Most of the settings for bubble charts are common. This section lists settings unique to bubble charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  - **Use Bubble Art**
    Check this option to use the default art for the bubble markers. Checking this option disables the options in the Bubble section.
  - **Transparency**
    This parameter controls the transparency of the bubble markers. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Bubble Size**
    Enter the desired bubble size in the text box, or use the up/down arrows to select a value from 1 to 100.

- **Bubble**

  With the options in this section you can configure the appearance of the series markers for the selected chart.

- **Series**
  Use Series to select the series to modify. The Bubble Color option applies to the series that is currently selected in the combo box.
- **Bubble Color**
  Use Bubble Color to set the bubble color for the selected series.

  1. Click the Bubble Color box (shown in the margin) to display the Color dialog box.
  2. Select a color from the palette and click OK to set the marker color.

Note. This option is available only when the Use Bubble Art option is not currently selected in the Plot Settings section.

Values

Use the options in this section to configure the appearance of the value labels for the selected component. The value labels are displayed when the pointer passes over a value marker symbol.

- **Show Values**

  Check this option to display value labels when the pointer passes over a marker symbol.

- **Current Value**

  Use this option to control the value displayed on the value labels. Select the value to be displayed from the combo box. Choose from the following: X Values, Y Values, and Size Values.

- **Font Settings**

  Use Font to configure the font used for the value labels. See the online help for more information about font settings.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The avail-

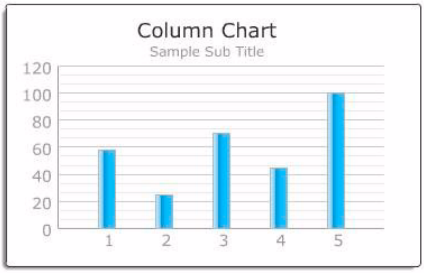
able formats are a subset of the format options available in Excel.

If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

See the online help for more information about numeric settings.

Unique Column Chart Elements

A single- or multi-bar is chart ideal for showing and comparing one or more items over a period of time or in a specific range of values. You might, for example, use a Column Chart in models that contain the quarterly headcount by region.



Most of the settings for column charts are common. This section lists settings unique to column charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  - **Use Bar Art**
    Check this option to use the default art for the bar markers. Checking this option disables the options in the Bars section.

  - **Transparency**
    This parameter controls the transparency of the bar markers. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Bar Width**
    Enter the desired bar width in the text box, or use the up/down arrows to select a value from 1 to 100.
- **Bars**

  With the options in this section you can configure the appearance of the series markers for the selected chart.

  - **Series**
    Use Series to select the series to modify. The Bar Color option applies to the series that is currently selected in the combo box.
  - **Bar Color**
    Use Bar Color to set the bar color for the selected series.

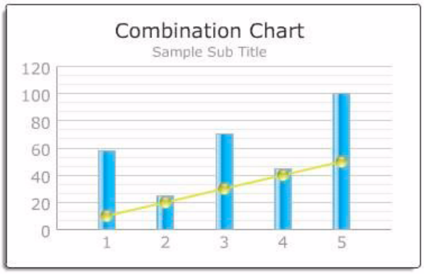
    1. Click the Bar Color box (shown in the margin) to display the Color dialog box.

    2. Select a color from the palette and click OK to set the marker color.

Note. This option is available only when the Use Bar Art option is not currently selected in the Plot Settings section.

Unique Combination Chart Elements

A combination Column and Line chart is ideal for displaying a range of values and a trend line for those values.



Many of the settings for combination charts are common. Many common settings do not apply to combination charts. This section lists settings unique to combination charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Column Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  - **Use Bar Art**
    Check this option to use the default art for the bar markers. Checking this option disables the options in the Bars section.
  - **Transparency**
    This parameter controls the transparency of the bar markers. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Bar Width**
    Enter the desired bar width in the text box, or use the up/down arrows to select a value from 1 to 100.

- **Line Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  - **Show Markers**
    Select this option to display line markers on the selected chart. Un-checking this option disables all other options in this section, as well as the marker options in the Lines & Markers section.
  - **User Marker Art**
    Select this option to use the default art for the line markers. Checking this option disables the Show Highlights option, as well as the Marker Color option in the Lines & Markers section.
  - **Transparency**
    This parameter controls the transparency of the line as well as the line markers. Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 to 100. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Marker Size**
    Enter the desired marker size in the text box, or use the up/down arrows to select a value from 1 to 100.
  - **Show Highlights**
    Select this option to enable the marker highlight display. Enabling this option displays a round highlight effect behind the chart marker symbols.
- **Series Markers**
  - **Series**
    Use **Series** to select the series to modify. The other options in the section apply to the series that is currently selected in the combo box.
  - **Series Type**
    Choose whether the selected **Series** should be represented with line or column markers. Depending on the selection, different options will become available in order to configure the appearance of the series.

If the **Series Type** is set to **column**, the following options will be shown:

- **Bar Color**
  Use **Bar Color** to set the bar color for the selected series.

1. Click the **Bar Color** box to display the Color dialog box.
2. Select a color from the pallette and click **OK** to set the marker color.

Note. This option is available only when the **Use Bar Art** option is not currently selected in the **Column Plot Settings** section.

If the **Series Type** is set to **line**, the following options will be shown:

- **Line Color**
  Use this option to set the line color for the selected series.

1. Click the **Line Color** box to display the Color dialog box.
2. Select a color from the pallette and click **OK** to set the line color.

- **Line Weight**
  Line Weight controls the width of the line for the selected series. Enter the desired weight in the text box, or use the up/down arrows to select a value from 1 to 100.
- **Marker**
  Select the desired marker symbol for the selected series.
- **Marker Color**
  Use this option to set the color of the selected marker symbol.

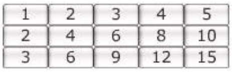
1. Click the **Marker Color** box to display the Color dialog box.

2. Select a color from the pallette and click **OK**.

Note. This option is available only if the **Use Marker Art** option is not currently selected in the **Line Plot Settings** section.

Unique Grid Chart Elements

A dynamic table that represents a group of rows and columns, the Grid lets you show just the data on any table, or permits data modification that can impact other components.



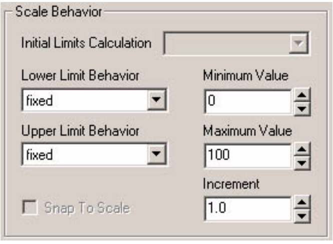
1	2	3	4	5
2	4	6	8	10
3	6	9	12	15

Many common settings do not apply to grids. This section lists settings unique to grid charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Behavior

Scale Behavior

Use the options in this section to define the behavior of lower and upper limits. These limits are applied to every item in the grid.



Scale Behavior

Initial Limits Calculation:

Lower Limit Behavior: fixed

Minimum Value: 0

Upper Limit Behavior: fixed

Maximum Value: 100

Increment: 1.0

☐ Snap To Scale

Limits can be used to prevent the user from manually setting the grid items to certain values.

- **Lower Limit Behavior**

  Use this option to set the Lower Limit Behavior for the component. Choose from the following:

  - **Fixed -** The user cannot set the grid items to values less than the Minimum Value.

  - **Open -** The user can set the grid items to any value that does not conflict with the Upper Limit.
- **Upper Limit Behavior**

  Use this option to set the Upper Limit Behavior for the component. Choose from the following:

  - **Fixed -** The user cannot set the grid items to values greater than the Maximum Value.
  - **Open -** The user can set the grid items to any value that does not conflict with the Lower Limit.
- **Minimum Value**

  Minimum Value is the Lower Limit and is available only when the Lower Limit Behavior is fixed. Enter the desired value in the text box, or use the up/down arrows to adjust the value.

- **Maximum Value**

  Maximum Value is the Upper Limit and is available only when the Upper Limit Behavior is fixed. Enter the desired value in the text box, or use the up/down arrows to adjust the value.

- **Increment**

  Grid item values that are manually set are rounded to the Increment number, allowing restricted input for quantities that require specific increments, such as dozens.

  Numbers can also be made more readable by using the Increment to round to a specific digit. Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Alerts

Target With the Target text box you can set the target data used to trigger the alert colors. With the Target selection option, you can select a cell so that actual data can be compared to the selected target. In the grid component, cells selected for the target will become the alert targets for each corresponding cell in the grid.

- **Target text box**

  This option is available in the grid and all single value components that have the Alert tab enabled (dial, gauge, value, progress bars, and sliders). This option lets you manually enter the alert target value for the component.

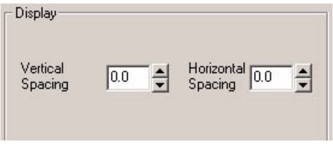
- **Target selection**

  This option lets you select the alert target data from the spreadsheet.

Appearance

Display

Use the options in this section to control the amount of space between the grid cells.



Display

Vertical Spacing 0.0

Horizontal Spacing 0.0

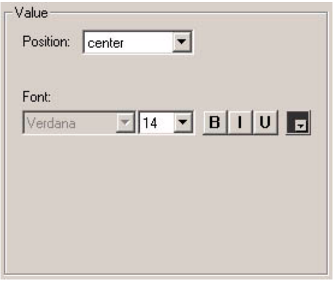
- **Vertical Spacing**

  Vertical Spacing determines the amount of spacing above and below each value of the grid. Enter the desired vertical spacing in the text box, or use the up/down arrows to adjust the value.

- **Horizontal Spacing**

  Horizontal Spacing determines the amount of spacing to the left and right of each value of the grid. Enter the desired horizontal spacing in the text box, or use the up/down arrows to adjust the value.

Value Use the options in this section to configure the appearance of the value label for the selected component.



- **Position**

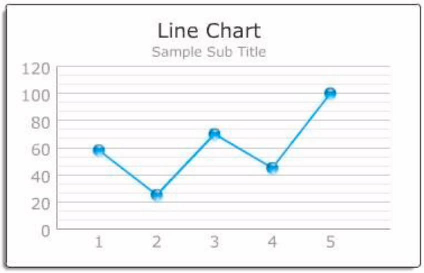
  Select the desired position for the value from the combo box. Choose from left, center, or right.

- **Font Settings**

  Use Font to configure the font used for the value. See the online help for more information.

Unique Line Chart Elements

A single- or multi-line chart is ideal for showing tendency over a period of time. Use this chart in models that emphasize a trend line or a continuing sequence of data. For example, Stocks Prices, Revenues History, and so on.



Most of the settings for line charts are common. This section lists settings unique to line charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  - **Show Markers**
    Select this option to display line markers on the selected chart. Un-checking this option disables all other options in this section, as well as the marker options in the Lines & Markers section.
  - **Use Marker Art**
    Check this option to use the default art for the line markers. Checking this option disables the options in the Line & Markers section.
  - **Transparency**
    This parameter controls the transparency of the line as well as the markers. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Marker Size**
    Enter the desired marker size in the text box, or use the up/down arrows to select a value from 1 to 100.
  - **Show Highlights**
    Select this option to enable the marker highlight display. Enabling this option displays a round highlight effect behind the chart marker symbols.

- **Line & Markers**

  With the options in this section you can configure the appearance of the series markers for the selected chart.

  - **Series**
    Use Series to select the series to modify. The Bar Color option applies to the series that is currently selected in the combo box.
  - **Line Color**
    Use Line Color to set the line color for the selected series.

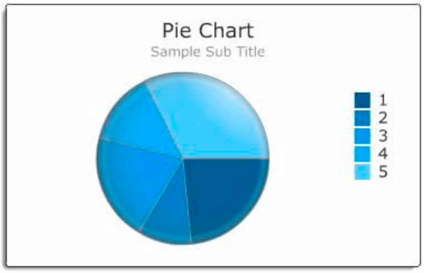
   1. Click the Line Color box (shown in the margin) to display the Color dialog box.
   2. Select a color from the palette and click OK to set the marker color.

- **Line Weight**
  Line Weight controls the width of the line for the selected series. Enter the desired weight in the text box, or use the up/down arrows to select a value from 1 to 100.
- **Marker**
  Select the desired marker symbol for the selected series.
- **Marker Color**
  Use this option to set the color of the selected marker symbol.
   1. Click the Marker Color box to display the Color dialog box.
   2. Select a color from the palette and click OK.

Note. This option is available only when the Use Marker Art option is not currently selected in the Plot Settings section.

Unique Pie Chart Elements

A pie chart represents the distribution or participation of each slide (item) over a certain total that is represented on the overall pie value. The Pie Chart is appropriate for models such as Revenue Contribution by Product. For a Revenue Contribution by Product pie chart the overall pie size represents the total revenues and each slice represents a different product.



Most of the settings for pie charts are common. This section lists settings unique to pie charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  - **Transparency**
    This parameter controls the transparency of the pie slices and dividing lines. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Show Lines**
    Select this option to display dividing lines between the pie slices. Un-checking this option disables the Line Color and Line Weight options.
  - **Line Color**
    Use this option to set the color of the dividing lines.

    1. Click the Line Color box to display the Color dialog.

    2. Select a color from the palette and click OK.

  - **Line Weight**
    This parameter controls the width of the dividing lines. Enter the desired weight
    in the text box, or use the up/down arrows to select a value from 1 to 100.

- **Slices**

  With the options in this section you can configure the appearance of the pie slices for the selected chart.

  - **Data**
    Use Data to select the data point that corresponds to the slice of pie to be modified. The Bubble Color option applies to the data point that is currently selected in the combo box.
  - **Slice Color**
    Use Slice Color to set the slice color for the selected series.

    1. Click the Slice Color box (shown in the margin) to display the Color dialog box.

    2. Select a color from the palette and click OK to set the marker color.

Values Use the options in this section to configure the appearance of the value labels for the selected component. The value labels are displayed when the pointer passes over a value marker symbol.

- **Show Values**

  Check this option to display value labels when the pointer passes over a marker symbol.

- **Font Settings**

  Use Font to configure the font used for the value labels. See the online help for more information about font settings.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The avail-

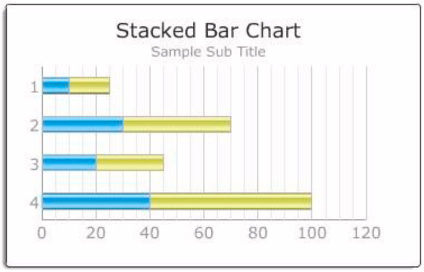
able formats are a subset of the format options available in Excel.

If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

See the online help for more information about numeric settings.

Unique Stacked Bar Chart Elements

A powerful chart that allows you compare several variables over a period of time, stacked bars allow you to compare one or more variables by adding one variable on top of another. These type of charts are ideal when comparing several variables over a period of time, e.g. Marketing Cost, General Cost, Administrative Cost. Each one of the cost components is presented in a different color and each portion represents a different variable. The total bar size represents the Total Cost.



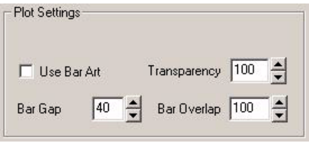
Most of the settings for stacked bar charts are common. This section lists settings unique to stacked bar charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  Plot Settings

  ☐ Use Bar Art

  Transparency 100

  Bar Gap 40

  Bar Overlap 100

  - **Use Bar Art**
    Check this option to use the default art for the bar markers. Checking this option disables the options in the Bars section.
  - **Transparency**
    This parameter controls the transparency of the bar markers. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Bar Gap**
    Enter the desired gap between bars in the text box, or use the up/down arrows to select a value from 1 to 100.
  - **Bar Overlap**
    Enter the desired overlap of the stacked bars in the text box, or use the up/down arrows to select a value from 1 to 100. A value of 100 means that the stacked bars overlap entirely, while a value of 0 means that the stacked bars do not overlap at all.

- **Bars**

  With the options in this section you can configure the appearance of the series markers for the selected chart.

  - **Series**
    Use Series to select the series to modify. The Bar Color option applies to the series that is currently selected in the combo box.

- **Bar Color**
  Use Bar Color to set the bar color for the selected series.

  1. Click the **Bar Color** box to display the Color dialog box.

  2. Select a color from the pallet and click **OK** to set the marker color.

Note. This option is available only when the **Use Bar Art** option is not currently selected in the **Plot Settings** section.

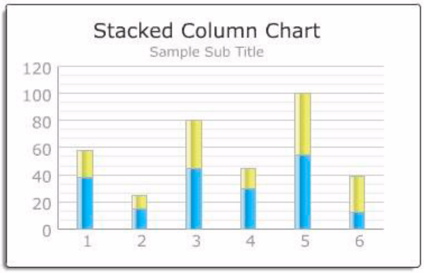
- **Values**

  Use the options in this section to configure the appearance of the value labels for the selected component. The value labels are displayed when the pointer passes over a value marker symbol.

  - **Show Values**
    Check this option to display value labels when the pointer passes over a marker symbol.
  - **Font Settings**
    Use Font to configure the font used for the value labels. See the online help for more infomation on font settings.
  - **Numeric Format**
    Use Numeric Format to apply predefined formats to values that are displayed. See the online help for more information about the Numeric Format settings.

Unique Stacked Column Chart Elements

A powerful chart that allows you compare several variables over a period of time, stacked columns allow you to compare one or more variables by adding one variable on top of another. These type of charts are ideal when comparing several variables over a period of time, e.g. Marketing Cost, General Cost, Administrative Cost. Each one of the cost components is presented in a different color and each portion represents a different variable. The total column size represents the Total Cost.



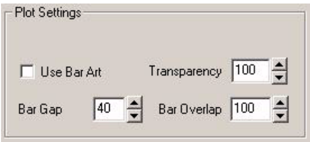
Most of the settings for stacked column charts are common. This section lists settings unique to stacked column charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.



Plot Settings

☐ Use Bar Art

Transparency 100

Bar Gap 40

Bar Overlap 100

  - **Use Bar Art**
    Check this option to use the default art for the bar markers. Checking this option disables the options in the Bars section.
  - **Transparency**
    This parameter controls the transparency of the bar markers. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Bar Gap**
    Enter the desired gap between bars in the text box, or

  use the up/down arrows to select a value from 1 to 100.

  - **Bar Overlap**
    Enter the desired overlap of the stacked bars in the text box, or use the up/down arrows to select a value from 1 to 100. A value of 100 means that the stacked bars overlap entirely, while a value of 0 means that the stacked bars do not overlap at all.

- **Bars**

  With the options in this section you can configure the appearance of the series markers for the selected chart.

  - **Series**
    Use Series to select the series to modify. The Bar Color option applies to the series that is currently selected in the combo box.
  - **Bar Color**
    Use Bar Color to set the bar color for the selected series.

    1. Click the **Bar Color** box to display the Color dialog box.

    2. Select a color from the pallet and click **OK** to set the marker color.

Note. This option is available only when the **Use Bar Art** option is not currently selected in the **Plot Settings** section.

- **Values**

  Use the options in this section to configure the appearance of the value labels for the selected component. The value labels are displayed when the pointer passes over a value marker symbol.

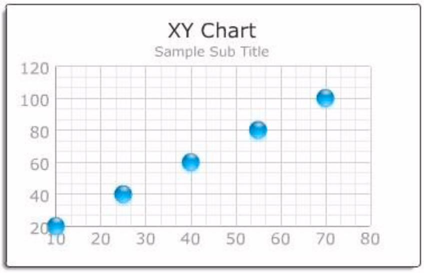
  - **Show Values**
    Check this option to display value labels when the pointer passes over a marker symbol.
  - **Font Settings**
    Use Font to configure the font used for the value

labels. See the online help for more infomation on font settings.

- **Numeric Format**
  Use Numeric Format to apply predefined formats to values that are displayed. See the online help for more information about the Numeric Format settings.

Unique XY (Scatter) Chart Elements

A powerful chart that displays data that requires two dimensions to complete the analysis, the XY chart shows each data point as a result of the intersection of X values and Y values. You can, for example, use the XY chart in models that compare ROI (X axis) against Market Value (Y axis) for a group of companies.



Most of the settings for XY (scatter) charts are common. This section lists settings unique to XY (scatter) charts. See the first part of the Charts section, starting on page 256, or the online help for more information about common chart settings.

Appearance

Series

- **Plot Settings**

  Use the options in this section to configure the plot area markers for the selected chart.

  - **Use Marker Art**
    Check this option to use the default art for the scatter markers. Checking this option disables the options in the Symbols section.

  - **Transparency**
    This parameter controls the transparency of the scatter markers. Enter the desired transparency in the text box, or use the up/down arrows to adjust the value. Valid values range from 0 (completely transparent) to 100 (completely opaque).
  - **Symbol Size**
    Enter the desired symbol size in the text box, or use the up/down arrows to select a value from 1 to 100.

- **Symbol**

  With the options in this section you can configure the appearance of the series markers for the selected chart.

  - **Series**
    Use Series to select the series to modify. The Bubble Color option applies to the series that is currently selected in the combo box.
  - **Symbol**
    Select the desired marker symbol for the selected series.
  - **Symbol Color**
    Use Symbol Color to set the symbol color for the selected series.

    1. Click the Symbol Color box (shown in the margin) to display the Color dialog box.
    2. Select a color from the palette and click OK to set the marker color.

Note. This option is available only when the Use Bubble Art option is not currently selected in the Plot Settings section.

Values Use the options in this section to configure the appearance of the value labels for the selected component. The value labels are displayed when the pointer passes over a value marker symbol.

- **Show Values**

  Check this option to display value labels when the pointer passes over a marker symbol.

- **Current Value**

  Use this option to control the value displayed on the value labels. Select the value to be displayed from the combo box. Choose from the following: X Values or Y Values.

- **Font Settings**

  Use Font to configure the font used for the value labels. See the online help for more information about font settings.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

  If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

  See the online help for more information about numeric settings.

Selectors

This section provides information about the controls available for Xcelsius selectors. The common elements are discussed first, with unique selector elements listed by selector type at the end of the section.

General

Insert Data

Each selector type requires unique insert data settings. See the unique selector type settings, starting on page 311.

Titles

Use the options in this section to set the title and labels for the selected component.

These options do not apply to the following selectors:

- Check Box (see “Unique Check Box Options” on page 311 for title settings)
- Filter (see “Unique Filter Options” on page 323 for title settings)

Title text box

Set this option to manually enter the title for the component. This option does not apply to Push Buttons.

Title selection

Click this option to select the title from the spreadsheet. This option does not apply to Push Buttons.

Labels selection

Click this option to select the labels from the spreadsheet.

Labels manual entry

Click this option to display a popup window to manually enter the labels.

Labels popup window

Use this option to manually enter the labels for the component.

Behavior

Options

Use the options in this section to specify how the component responds to user interaction in the generated SWF file.

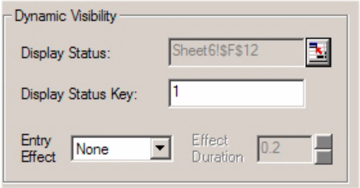
Sound Enabled

Check the Sound Enabled box to enable sound for the selected component.

This option does not apply to the Play Selector.

Note. This option applies only to the Combo Box and Menu components.

Dynamic Visibility



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

All selector types support Dynamic Visibility.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration

Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single

Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Appearance

Label Background

Use the options in this section to configure the background appearance of the selector's item labels. For the Combo Box and Filter components, these parameters apply to the drop-down list only.

Transparency

Use this option to control the transparency of the list items. Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 (completely transparent) to 100 (completely opaque).

Default Fill

Use this option to set the default fill color for the list items.

1. Click the Default Fill box to display the Color dialog box.
2. Select a color from the palette and click OK.

Selected Fill

Use this option to set the selection fill color for the list items.

1. Click the Selected Fill box to display the Color dialog box.
2. Select a color from the palette and click OK.

Mouse Over Fill

Use this option to set the mouse over fill color for the list items.

1. Click the Mouse Over Fill box to display the Color dialog box.
2. Select a color from the palette and click OK.

Labels

Use the parameters in this section to configure the appearance of the labels for the selected component.

Alignment

Select the desired label alignment from the combo box. Choose from left, center, or right.

Font Settings

Use Font to configure the font for the labels. See the online help for more information.

Numeric Format

With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

> If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.
>
> See the online help for more information about numeric settings.

Mouse Over Text color

Use this option to set the text color that the label displays on a mouse over event.

1. Click the color selection box to display the Color dialog box.
2. Select a color from the palette and click OK.

Selected Text color

Use this option to set the text color that the label displays when the item is selected.

1. Click the color selection box to display the Color dialog box.
2. Select a color from the palette and click OK.

Rows Displayed

Use this option to control the number of rows that appear in the drop-down list. Enter the desired number of rows to display in the text box, or use the up/down arrows to adjust the value.

Note. This option applies only to Combo Box and Filter components.

Title

With the options in this section you can configure the appearance of the title for the selected component.

These options do not apply to the following selectors:

- Play Buttons
- Push Buttons
- Tables

Position Positions the title. Choose from the available options, which may include: top left, top center, top right, left, right, bottom left, bottom center, bottom right.

Show Title Displays the title on the selected component.

X Shift Shifts the labels to the left or right relative to the position specified in the Position parameter. Enter the desired x shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels to the right, negative values shift the labels to the left.

Enter the desired x shift in the text box, or use the up/down arrows to adjust the value.

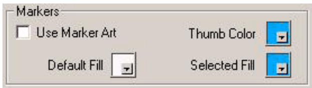
Y Shift Shifts the labels up or down relative to the position specified in the Position parameter. Enter the desired y shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels up, negative values shift the labels down.

Enter the desired y shift in the text box, or use the up/down arrows to adjust the value.

Font Settings Configures the font for the title text. See the online help for more information.

Markers

Use the parameters in this section to configure the colors of the selector.



Markers apply to radio buttons, combo boxes, push buttons, lists, and filters.

Use Marker Art

Select the Use Marker Art check box to use the default colors of the combo box. When this option is unchecked, the colors of the combo box pieces are determined by the **Thumb Color**, **Default Fill**, and **Selected Fill** colors.

Thumb Color

Use this option to change the color of the draggable thumb piece in the scroll bar.

1. Click the **Thumb Color** box to display the Color dialog box.

2. Select a color from the pallette and click **OK**.

Note. This option is available only when **Use Marker Art** is unchecked.

Default Fill

Use this option to set the Default Fill color of the combo box button. The button will be shown in this color when the combo box is closed.

1. Click the **Default Fill** box to display the Color dialog box.

2. Select a color from the pallet and click **OK**.

Note. This option is available only when **Use Marker Art** is unchecked.

Selected Fill

Use this option to set the Selected Fill color of the combo box button. The button will be shown in this color when the combo box is open.

1. Click the **Selected Fill** box to display the Color dialog box.

2. Select a color from the pallette and click **OK**.

Note. This option is available only when **Use Marker Art** is unchecked.

Unique Check Box Options

A check box is a standard user-interface component that allows users to toggle between two states: checked and unchecked.

When the Check Box is toggled, the data corresponding to the state of the Check Box is inserted into the Insert In range.

The Check Box is often used in conjunction with Dynamic Visibility to show and hide components. See “Dynamic Visibility” on page 306 for more information.

Most of the settings for check box selectors are common. This section lists settings unique to check box selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

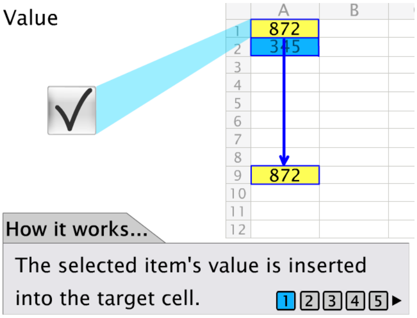
General

Insert Data

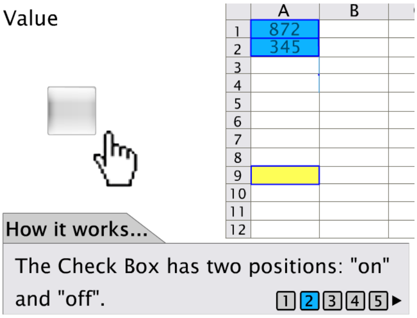
Use the options in this section to define how the Check Box component will behave when a selection is made. There are three parameters:

- **Insert Option -** the structure of the data that is inserted when a selection is made.

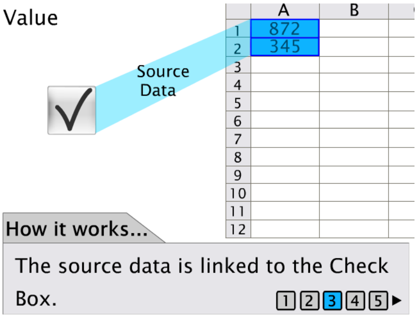
  This option is disabled for the check box component because “value” is the only valid option. The images below show how the Insert option works with check boxes:



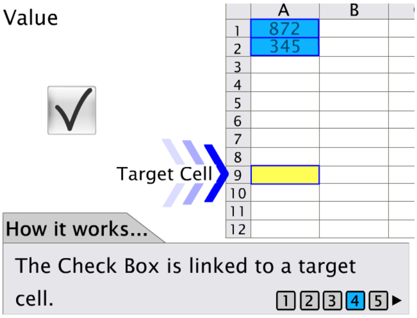
The selected item's value is inserted into the target cell.



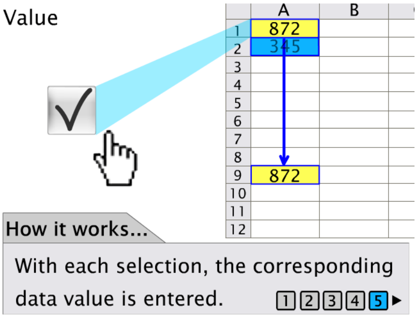
The Check Box has two positions: "on" and "off".



The source data is linked to the Check Box.

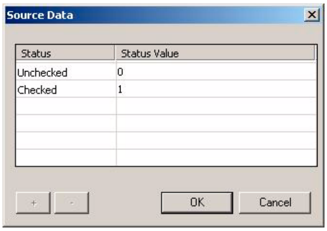


The Check Box is linked to a target cell.



With each selection, the corresponding data value is entered.

- **Source Data -** the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
  - Use Source Data (button shown in the margin) to select the source data from the spreadsheet.
  - Use Source Data manual entry (button shown in the margin) to display a popup window for manually entering the source data.
  - Use the Source Data popup window for manual entry of the source data.



Status	Status Value
Unchecked	0
Checked	1

- **Insert In -** the cell(s) into which the selected data is inserted.

  Use Insert In (button shown in the margin) to select the range from the spreadsheet into which the selected values will be inserted.

Titles

This section lets you set the title for the selected component.

- **Title text box**

  Use this option to manually enter the title for the component.

- **Title selection**

  Use this option to select the title from the spreadsheet.

Behaviour

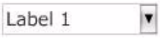
Default Options

- **Default Selection**

  Choose from either "Checked" or "Unchecked" to specify the state that the Check Box should be in the model is loaded. This option also determines which default data is inserted into the Insert In range when the model is loaded.

Unique Combo Box Options

A combo box is a standard user-interface component that drops down a vertical list of items when it is pressed. Users can then select an item from the list in the same manner as the List Box (see “Unique List Box Options” on page 326).



With each selection that is made, data corresponding to that selection is inserted into the Insert In range.

When there are more items in the list than the number of rows displayed, a scroll bar is automatically added to allow users to scroll through all of the available items.

Like all Selectors, the Combo Box is often used to populate components with data or in conjunction with Dynamic

Visibility to show and hide components. See “Dynamic Visibility” on page 306 for more information.

Most of the settings for combo box selectors are common. This section lists settings unique to combo box selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

General

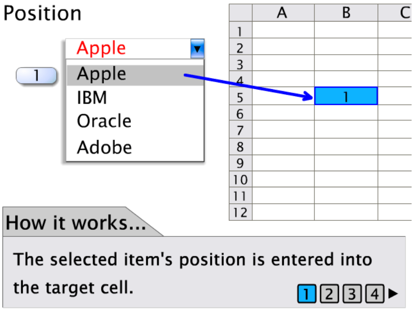
Insert Data

Use the options in this section to define how the Combo Box component behaves when a selection is made. There are three parameters:

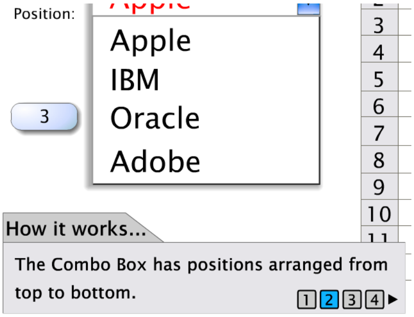
- **Insert Option -** the structure of the data that is inserted when a selection is made.

  Use this option to specify the structure of the data inserted when a selection is made. Combo Boxes support the following structures:

  - **position**
    The images below show how this Insert option works:

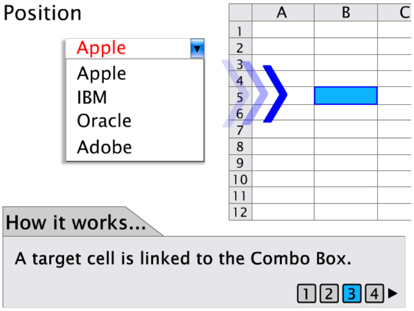


The selected item's position is entered into the target cell.



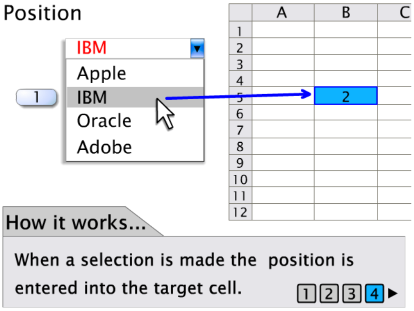
How it works...

The Combo Box has positions arranged from top to bottom.



How it works...

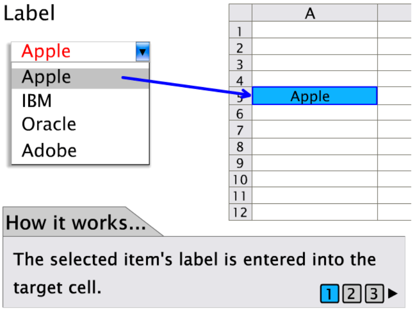
A target cell is linked to the Combo Box.



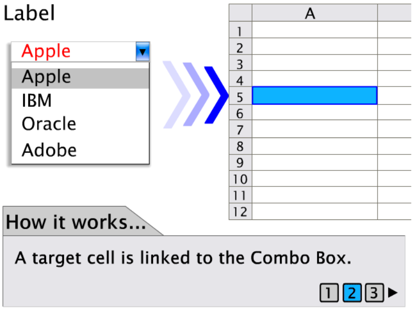
How it works...

When a selection is made the position is entered into the target cell.

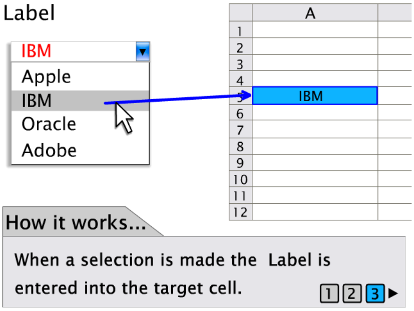
- **label**
  The images below show how this Insert option works:



The selected item's label is entered into the target cell.

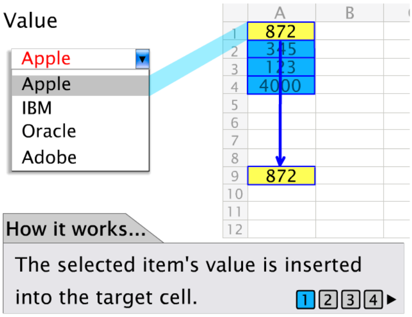


A target cell is linked to the Combo Box.

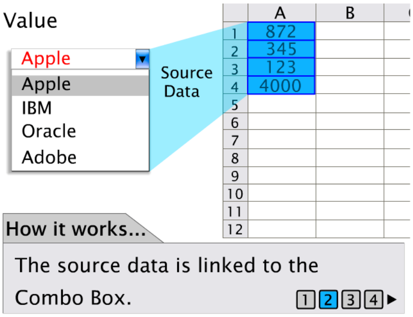


When a selection is made the Label is entered into the target cell.

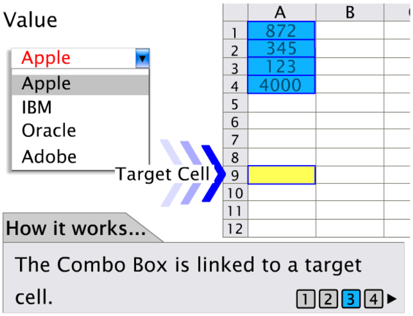
- **value**
  The images below show how this Insert option works:



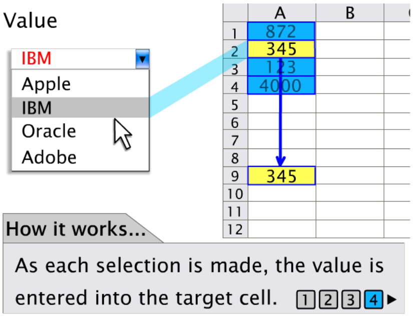
The selected item's value is inserted into the target cell.



The source data is linked to the Combo Box.

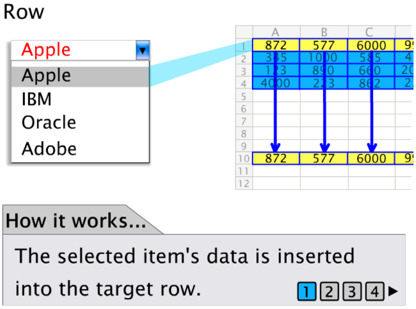


The Combo Box is linked to a target cell.

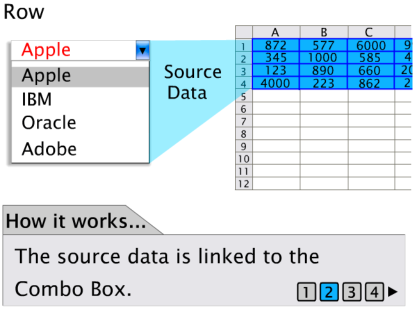


As each selection is made, the value is entered into the target cell.

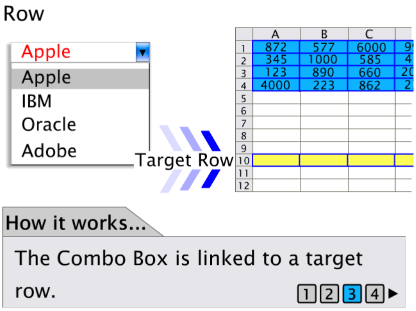
- **rows**
  The images below show how this Insert option works:



The selected item's data is inserted into the target row.

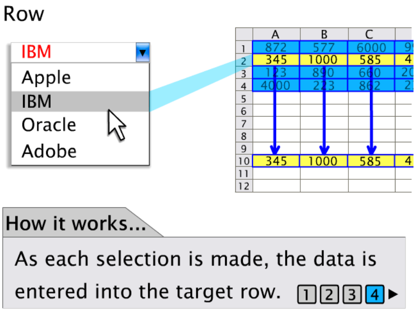


The source data is linked to the Combo Box.



How it works...

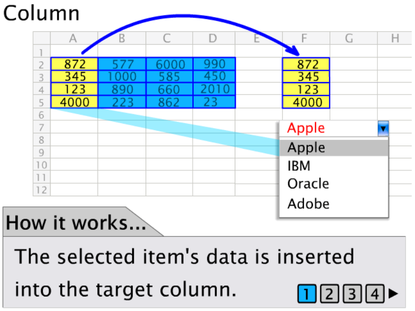
The Combo Box is linked to a target row.



How it works...

As each selection is made, the data is entered into the target row.

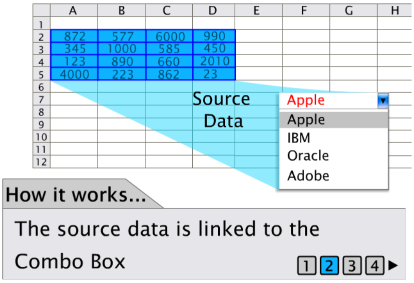
- **columns**
  The images below show how this Insert option works:



How it works...

The selected item's data is inserted into the target column.

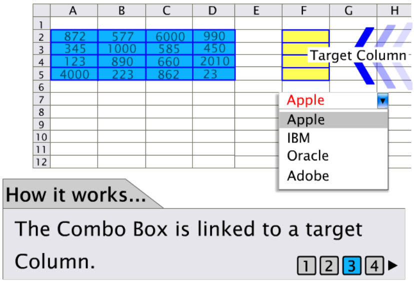
Column



How it works...

The source data is linked to the Combo Box

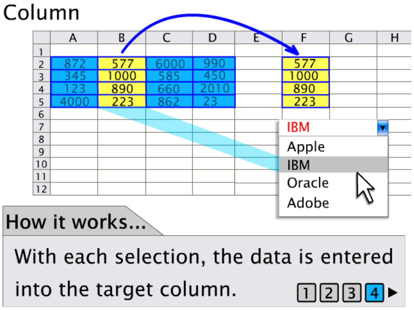
Column



How it works...

The Combo Box is linked to a target Column.

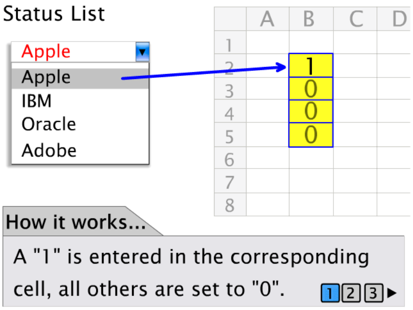
Column



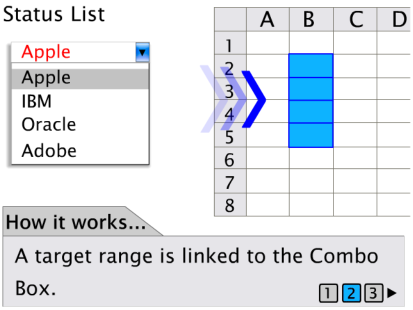
How it works...

With each selection, the data is entered into the target column.

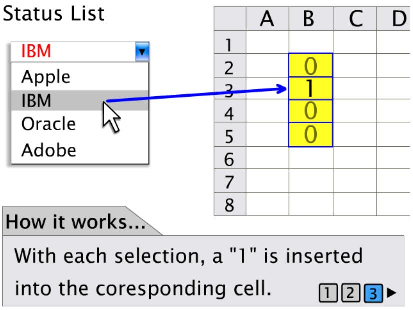
- **status list**
  The images below show how this Insert option works:



A "1" is entered in the corresponding cell, all others are set to "0".



A target range is linked to the Combo Box.



With each selection, a "1" is inserted into the coresponding cell.

- **Source Data** - the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
- **Insert In** - the cell(s) into which the selected data is inserted.

Behavior

Options

- **Open Animation**

  Check this option to enable the open/close animation. When checked, the component adds a fraction-of-a-second animation to the way it is opened and closed.

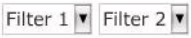
Default Options

- **Default Selection**

  Choose the label of the combo box item that will be selected in the Combo Box when the model is loaded. This option also determines which default data is inserted into the Insert In range when the model is loaded.

Unique Filter Options

The Filter component takes a range of data that shares a common number of items and allows users to "filter" the content using Combo Boxes (see “Unique Combo Box Options” on page 314) so that there are no duplicated records.

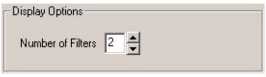


Most of the settings for filter selectors are common. This section lists settings unique to filter selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

General

Display Options

Use this section to set the number of combo boxes displayed for the selected Filter component.



Display Options

Number of Filters 2

- **Number of Filters**

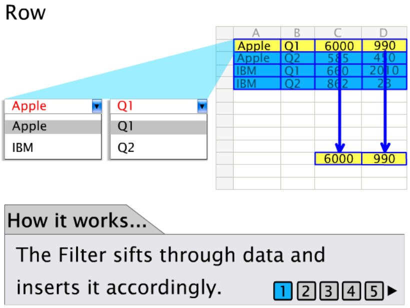
  Enter the desired number of filters in the text box, or use the up/down arrows to adjust the value.

Insert Data

Use the options in this section to define how the Filter component behaves when a selection is made. There are three parameters:

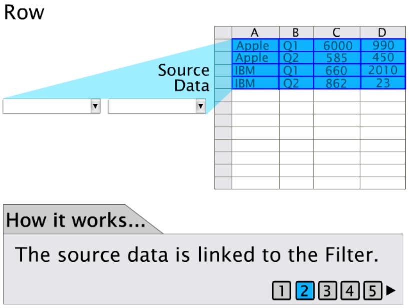
- **Insert Option** - the structure of the data that is inserted when a selection is made.

  This option is disabled for the Filter component because "value" is the only valid option. The images below show how the insert option works with filters:



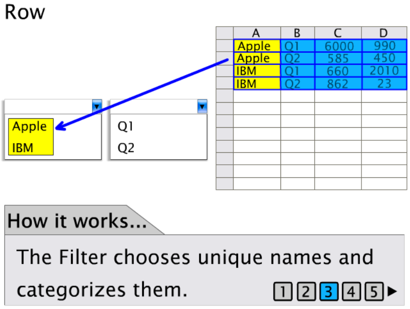
How it works...

The Filter sifts through data and inserts it accordingly.



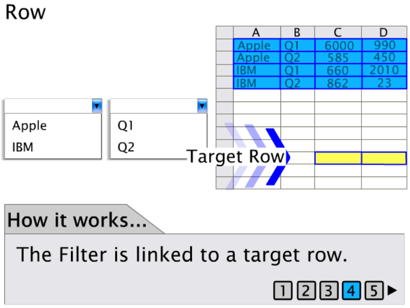
How it works...

The source data is linked to the Filter.



How it works...

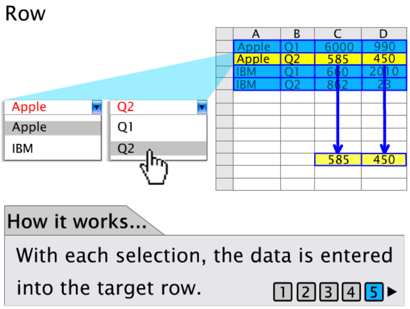
The Filter chooses unique names and categorizes them.



	A	B	C	D
	Apple	Q1	6000	990
	Apple	Q2	585	450
	IBM	Q1	660	2010
	IBM	Q2	862	23

How it works...

The Filter is linked to a target row.



	A	B	C	D
	Apple	Q1	6000	990
	Apple	Q2	585	450
	IBM	Q1	660	2010
	IBM	Q2	862	23

How it works...

With each selection, the data is entered into the target row.

- **Source Data -** the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
- **Insert In -** the cell(s) into which the selected data is inserted.

Titles Use the options in this section to set the titles for the selected component.

- **Titles selection**

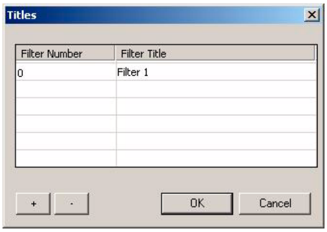
  Use this option (shown in the margin) to select the titles from the spreadsheet.

- **Titles manual entry**

  Use this option (shown in the margin) to display a popup window for manually entering the titles.

- **Titles popup window**

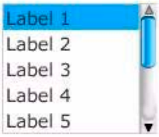
  Use this option to manually enter the titles for the component.



Filter Number	Filter Title
0	Filter 1

Unique List Box Options

A list box is a standard user-interface component that allows users to select items from a vertical list.



With each selection that is made, data corresponding to the selection is inserted into the Insert In range.

When the list of items becomes larger than the size of the List Box, a scroll bar is automatically added to allow users to scroll through all of the available items.

Like all Selectors, the List Box is often used to populate components with data or in conjunction with Dynamic Visibility to show and hide components. See “Dynamic Visibility” on page 306 for more information.

Most of the settings for list box selectors are common. This section lists settings unique to list box selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

General

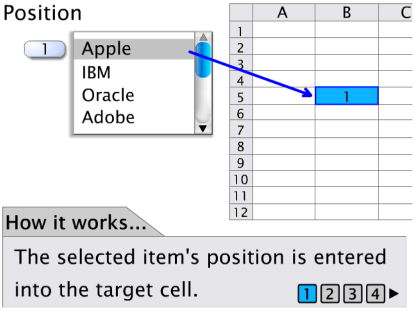
Insert Data

Use the options in this section to define how the List Box component will behave when a selection is made. There are three parameters:

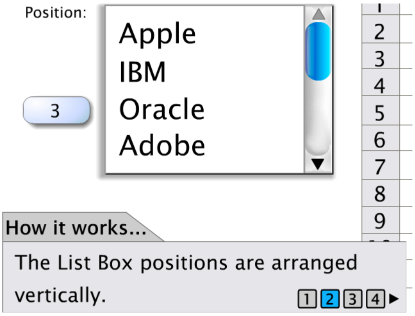
- **Insert Option -** the structure of the data that is inserted when a selection is made.

  Use this option to specify the structure of the data inserted when a selection is made. List boxes support the following insert options:

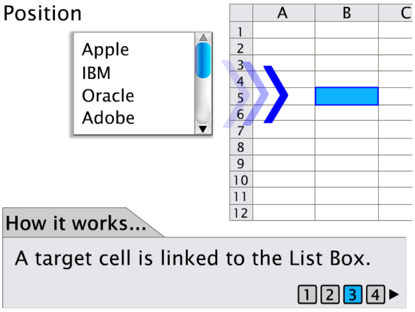
  - **position**



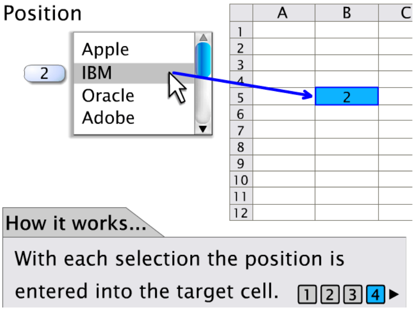
The selected item's position is entered into the target cell.



The List Box positions are arranged vertically.

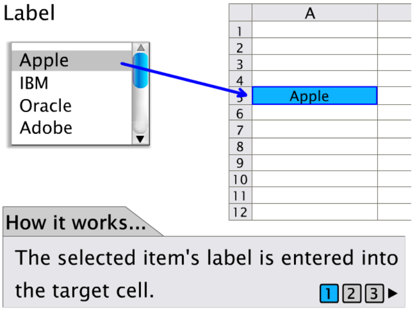


A target cell is linked to the List Box.

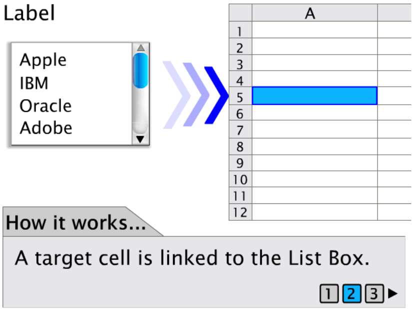


With each selection the position is entered into the target cell.

- **label**

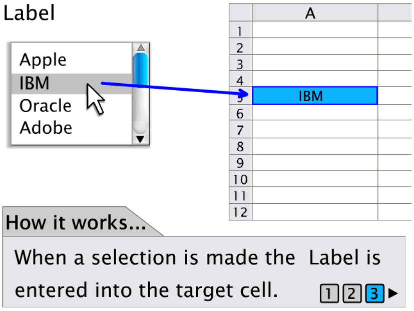


The selected item's label is entered into the target cell.



How it works...

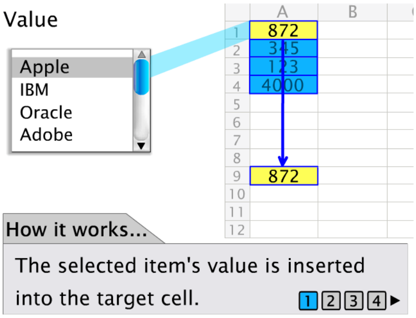
A target cell is linked to the List Box.



How it works...

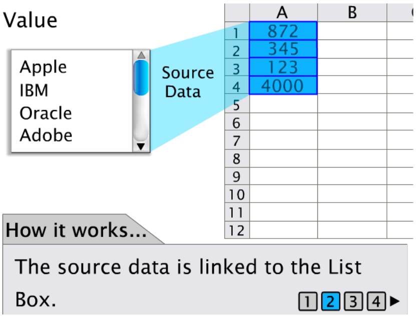
When a selection is made the Label is entered into the target cell.

- **value**

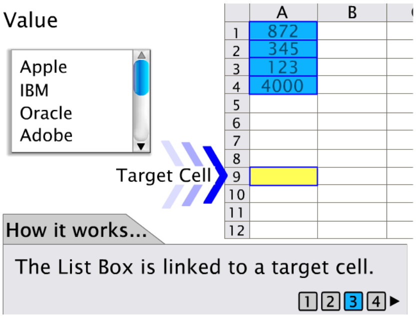


How it works...

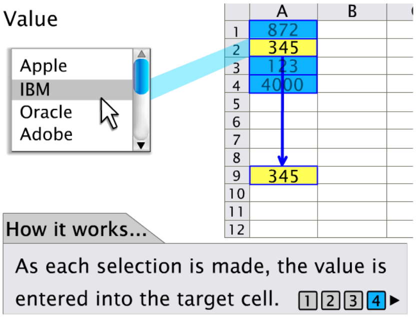
The selected item's value is inserted into the target cell.



The source data is linked to the List Box.



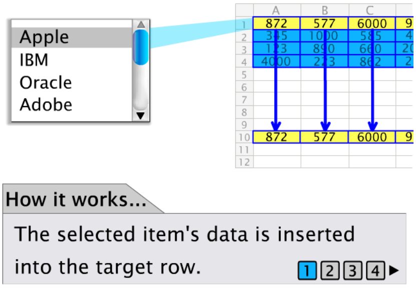
The List Box is linked to a target cell.



As each selection is made, the value is entered into the target cell.

- **rows**

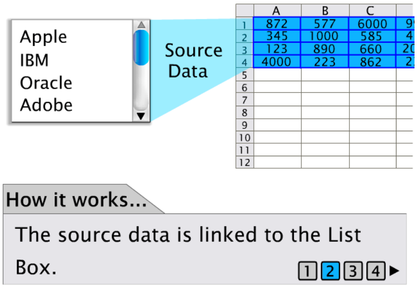
Row



How it works...

The selected item's data is inserted into the target row.

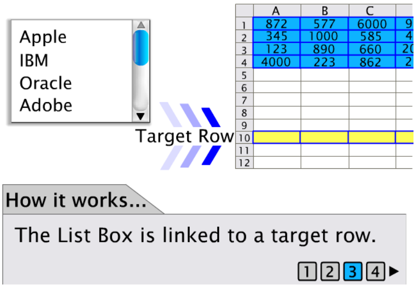
Row



How it works...

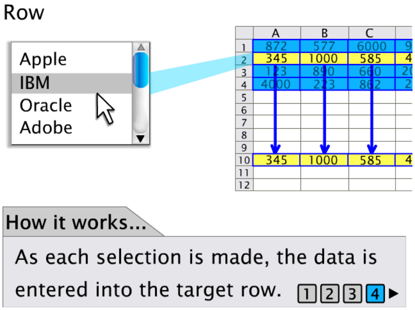
The source data is linked to the List Box.

Row



How it works...

The List Box is linked to a target row.

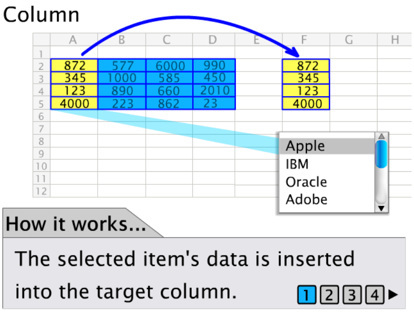


Row

How it works...

As each selection is made, the data is entered into the target row.

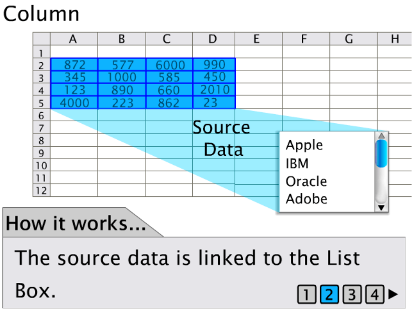
- **columns**



Column

How it works...

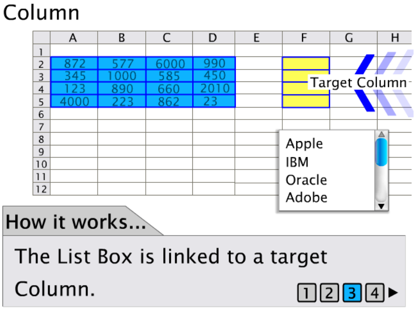
The selected item's data is inserted into the target column.



Column

How it works...

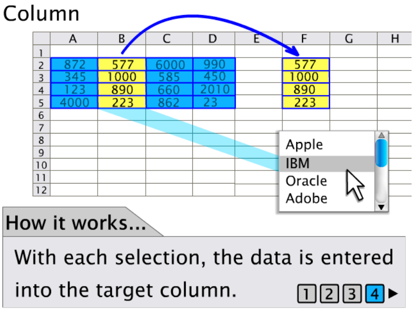
The source data is linked to the List Box.



	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990				
3	345	1000	585	450				
4	123	890	660	2010				
5	4000	223	862	23				

How it works...

The List Box is linked to a target Column.

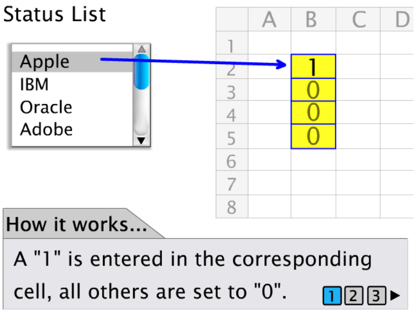


	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990		577		
3	345	1000	585	450		1000		
4	123	890	660	2010		890		
5	4000	223	862	23		223		

How it works...

With each selection, the data is entered into the target column.

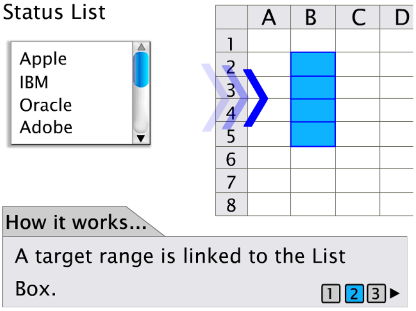
- **status list**



	A	B	C	D
1				
2		1		
3		0		
4		0		
5		0		
6				
7				
8				

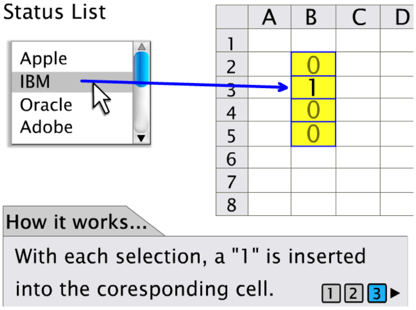
How it works...

A "1" is entered in the corresponding cell, all others are set to "0".



How it works...

A target range is linked to the List Box.



How it works...

With each selection, a "1" is inserted into the coresponding cell.

- **Source Data -** the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
- **Insert In -** the cell(s) into which the selected data is inserted.

Behavior

Options

Use the options in this section to specify how the component responds to user interaction in the generated SWF file.

- **Sound Enabled**

  Check the Sound Enabled box to enable sound for the selected component. This option is not available on the Table Selector.

- **Update On**

  Use Update On to define how the selected component recognizes that a selection has been made. Choose from the following:

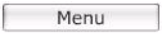
  - **Mouse Click -** When selected, users must click on an item to select it.
  - **Mouse Over -** An item is selected when the pointer passes over it.

Default Options

Choose the label that will be selected in the List Box when the model is loaded. This option also determines which default data is inserted into the Insert In range when the model is loaded.

Unique Menu Options

The Menu component allows users to select items from either a vertical or horizontal list.



With each selection that is made, data corresponding to that selection is inserted into the Insert In range.

The Menu can be set to either open when pressed, or to always remain expanded.

When the Menu is set to open when pressed, you can configure the Open Direction to control where the items of the Menu appear when it is opened.

Like all Selectors, the menu is often used to populate components with data or in conjunction with Dynamic Visibility to show and hide components. See “Dynamic Visibility” on page 306 for more information.

Most of the settings for menu selectors are common. This section lists settings unique to menu selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

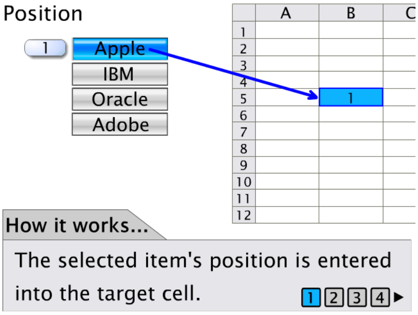
General

Insert Data Use the options in this section to define how the Menu component will behave when a selection is made. There are three parameters:

- **Insert Option -** the structure of the data that is inserted when a selection is made.

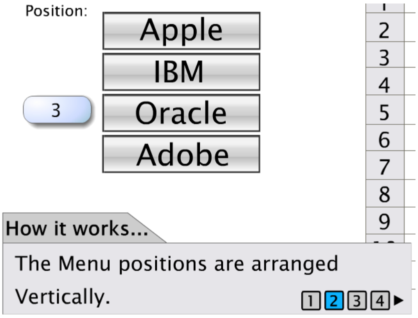
  Use this option to specify the structure of the data inserted when a selection is made. Menus support the following insert options:

  - **position**



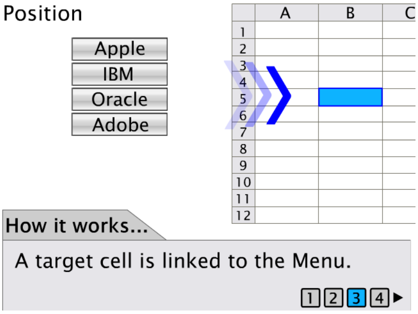
How it works...

The selected item's position is entered into the target cell.

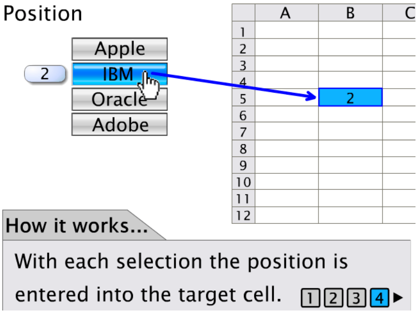


How it works...

The Menu positions are arranged Vertically.

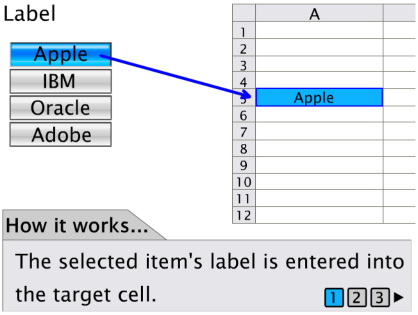


A target cell is linked to the Menu.

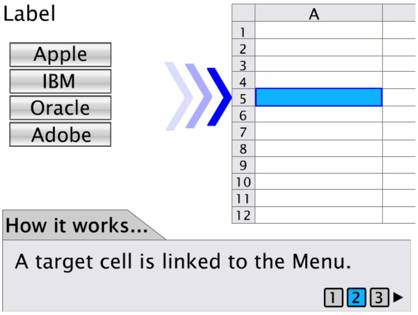


With each selection the position is entered into the target cell.

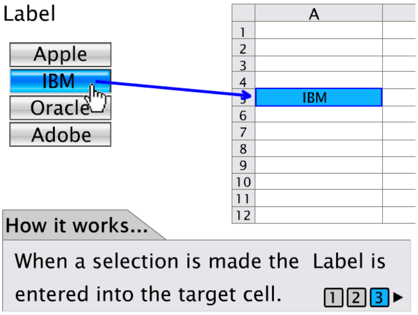
- **label**



The selected item's label is entered into the target cell.

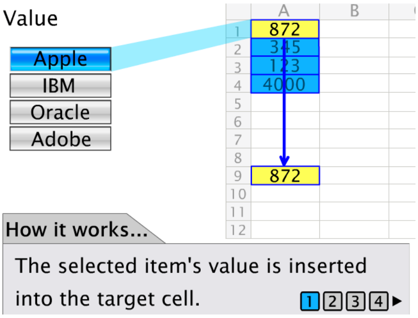


A target cell is linked to the Menu.

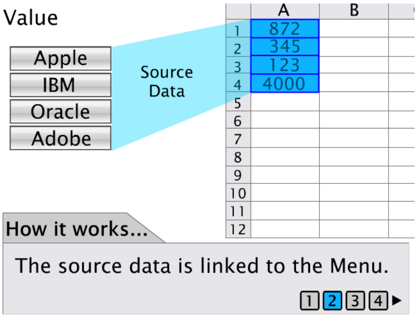


When a selection is made the Label is entered into the target cell.

- **value**

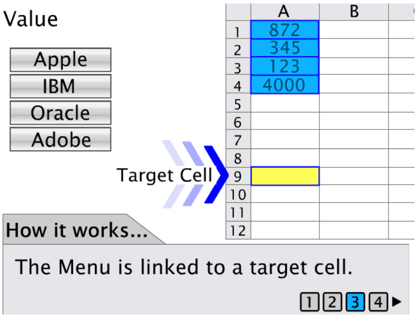


The selected item's value is inserted into the target cell.



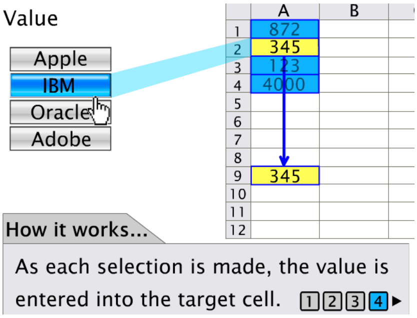
How it works...

The source data is linked to the Menu.



How it works...

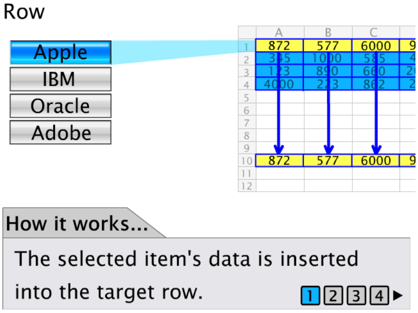
The Menu is linked to a target cell.



How it works...

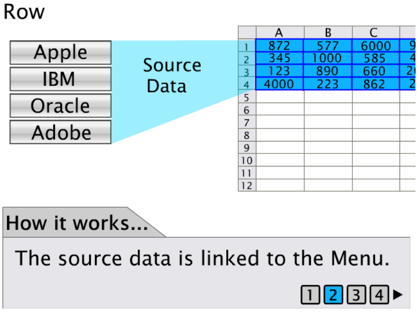
As each selection is made, the value is entered into the target cell.

- **rows**



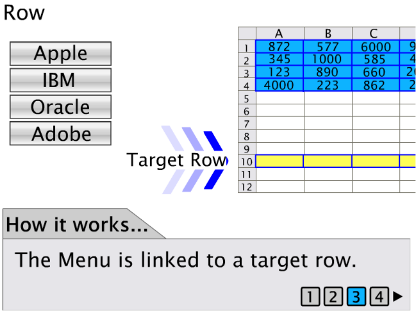
How it works...

The selected item's data is inserted into the target row.



How it works...

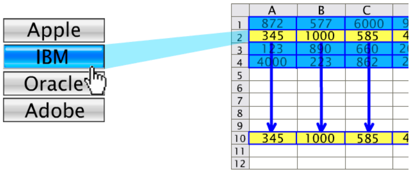
The source data is linked to the Menu.



How it works...

The Menu is linked to a target row.

Row

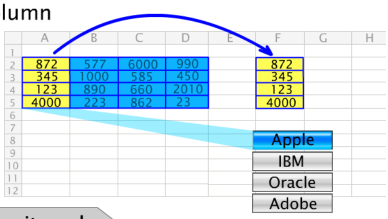


How it works...

As each selection is made, the data is entered into the target row. 1 2 3 4 ▶

- **columns**

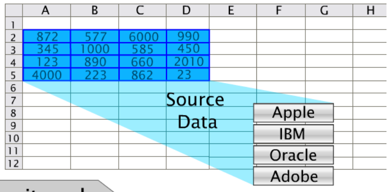
Column



How it works...

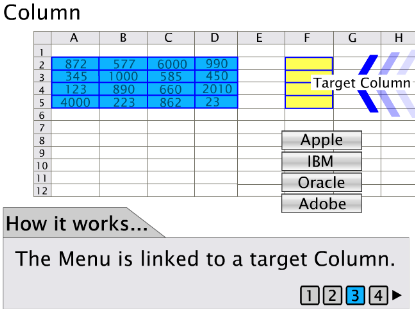
The selected item's data is inserted into the target column. 1 2 3 4 ▶

Column



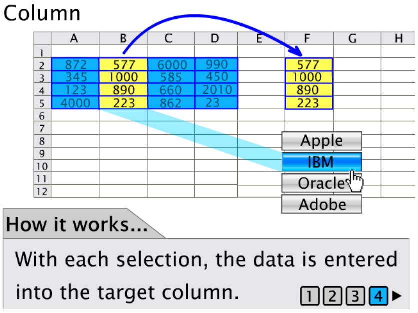
How it works...

The source data is linked to the Menu. 1 2 3 4 ▶



	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990				
3	345	1000	585	450				
4	123	890	660	2010				
5	4000	223	862	23				

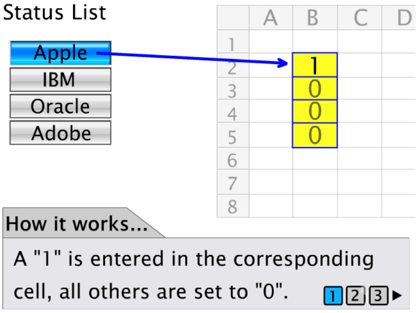
The Menu is linked to a target Column.



	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990		577		
3	345	1000	585	450		1000		
4	123	890	660	2010		890		
5	4000	223	862	23		223		

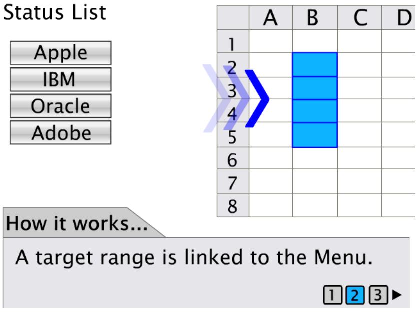
With each selection, the data is entered into the target column.

- **status list**



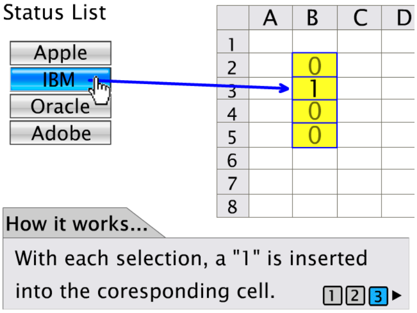
	A	B	C	D
1				
2		1		
3		0		
4		0		
5		0		
6				
7				
8				

A "1" is entered in the corresponding cell, all others are set to "0".



How it works...

A target range is linked to the Menu.



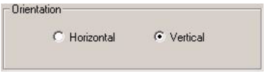
How it works...

With each selection, a "1" is inserted into the coresponding cell.

- **Source Data -** the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
- **Insert In -** the cell(s) into which the selected data is inserted.

Orientation

Use this section to control how the selectable elements of the component are arranged.



Orientation

○ Horizontal ● Vertical

- **Horizontal**

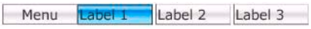
  Select this option to set the component orientation to horizontal.

- **Vertical**

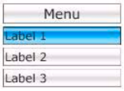
  Select this option to set the component orientation to vertical.

Example

Setting the orientation to horizontal for the Menu component results in the following:

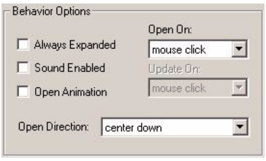


Setting the orientation to vertical for the Menu component results in the following:



Behavior

Options Use the options in this section to specify how the component responds to user interaction in the generated SWF file.


Behavior Options

☐ Always Expanded

☐ Sound Enabled

☐ Open Animation

Open On: mouse click

Update On: mouse click

Open Direction: center down

- **Always Expanded**

  Select this option to permanently display all of the labels contained on the menu. Selecting this option disables several other options and enables the Update On parameter.

- **Sound Enabled**

  Check the Sound Enable box to enable sound for the selected component.

- **Open Animation**

  Check this option to enable the open/close animation. When checked, the component adds a fraction-of-a-second animation to the way it is opened and closed.

- **Open On**

  Use this option to define how the menu opens. Choose from the following:

  - **Mouse Click -** When selected, users must click on the menu title to see the menu labels.
  - **Mouse Over -** Menu labels appear when the pointer moves over the menu title. The menu collapses when the pointer is removed from the menu title area.

- **Update On**

  Use Update On to define how the selected component recognizes that a selection has been made. Choose from the following:

  - **Mouse Click -** When selected, users must click on an item to select it.
  - **Mouse Over -** An item is selected when the pointer passes over it.

- **Open Direction**

  Use this option to define the direction into which the menu will expand once it is opened. The behaviors for this parameter depend on the Orientation parameter, which is set on the General Tab:

  - **Menu Orientation = Horizontal -** Options for Open Direction are “left” and “right”.
  - **Menu Orientation = Vertical -** Options for Open Direction are “center down”, “left down”, “right down”, “center up”, “right up”, and “left up”.

Default Options

Choose the label of the menu item that will be selected in the Menu when the model is loaded. This option also determines which default data is inserted into the Insert In range when the model is loaded.

Appearance

Label Background

Use the options in this section to configure the background appearance of the menu item labels.

- **Use Label Art**

  Select this option to use the default background art for the menu item labels. When this option is enabled, the Default Fill, Selected Fill, and Mouse Over Fill options are disabled. You can disable the Use Label Art option to enable the custom label fill options.

- **Separation**

  Use this option to control the spacing between menu items. Enter the desired separation in the text box, or use the up/down arrows to adjust the value. The higher the Separation number, the greater the spacing between menu items.

- **Transparency**

  Use this option to control the transparency of the menu items. Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 (completely transparent) to 100 (completely opaque).

- **Default Fill**

  Use this option to set the default fill color for the menu items.

  1. Click the Default Fill box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **Selected Fill**

  Use this option to set the selection fill color for the menu items.

  1. Click the Selected Fill box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **Mouse Over Fill**

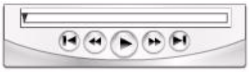
  Use this option to set the mouse over fill color for the menu items.

  1. Click the Mouse Over Fill box to display the Color dialog box.

2. Select a color from the palette and click OK.

Unique Play Selector Options

Play selectors are advanced components that allow users to interact with standard play controls to sequentially insert data from a defined range.



Each row or column (depending on the Insert Option) in the Source Data corresponds to a position of the play head in the Play Selector. As the play head is moved, the Source Data corresponding to that point is inserted into the Insert In range.

There are a number of different ways that users can interact with the Play Selector to adjust the position of the play head:

- The play button can be pressed to automatically move the play head forward. While the component is "playing", the pause button can be pressed to stop playing.
- The Rew/FWD buttons can also be pressed and held to quickly move the play head backward or forward respectively.
- The Prev/Next buttons can also be pressed to move the play head backward or forward one increment at a time. Holding down the Prev/Next buttons will continue to move the play head.
- The slider can also be dragged back and forth to adjust the position of the play head.

Most of the settings for play selectors are common. This section lists settings unique to play selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

General

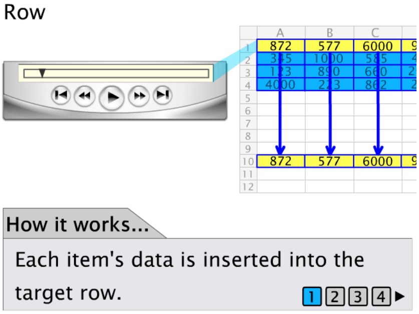
Insert Data

Use the options in this section to define how the Play Selector component will behave when a selection is made. There are three parameters:

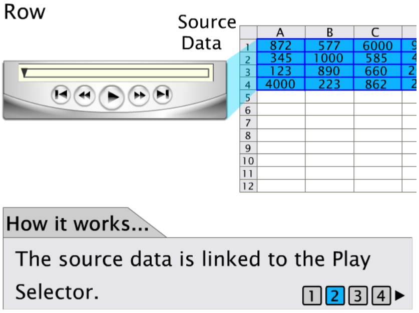
- **Insert Option -** the structure of the data that is inserted when a selection is made.
- **Source Data -** the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
- **Insert In -** the cell(s) into which the selected data is inserted.

  Use this option to specify the structure of the data inserted when a selection is made. Play selectors support the following insert options:

  - **rows**

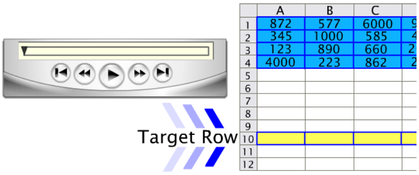


Each item's data is inserted into the target row.



The source data is linked to the Play Selector.

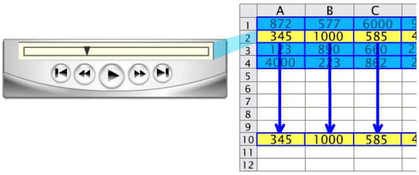
Row



How it works...

The Play Selector is linked to a target row.

Row

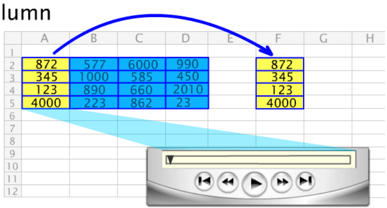


How it works...

As the component plays, the data is entered into the target row.

- **columns**

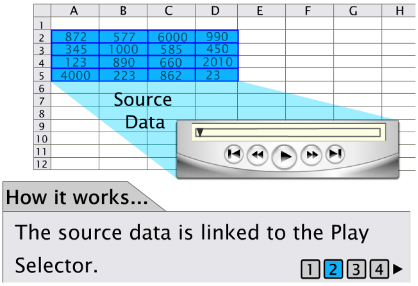
Column



How it works...

Each item's data is inserted into the target column.

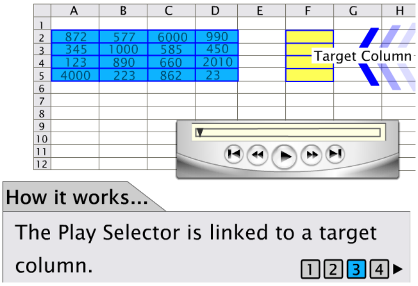
Column



	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990				
3	345	1000	585	450				
4	123	890	660	2010				
5	4000	223	862	23				

The source data is linked to the Play Selector.

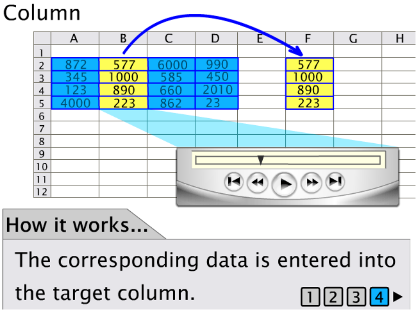
Column



	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990				
3	345	1000	585	450				
4	123	890	660	2010				
5	4000	223	862	23				

The Play Selector is linked to a target column.

Column



	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990		577		
3	345	1000	585	450		1000		
4	123	890	660	2010		890		
5	4000	223	862	23		223		

The corresponding data is entered into the target column.

Behavior

Default Options Choose the row from the Source Data that will be inserted into the Insert In range when the model is loaded. This option also determines the position of the playhead of the Play Selector when the model is loaded.

Appearance

Display

Use the options in this section to configure the appearance of the Play Selector.

- **Transparency**

  Use this option to control the transparency of the list items. Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 (completely transparent) to 100 (completely opaque).

Unique Push Button Options

A push button is a standard user-interface component that allows users to toggle between two states: on and off.

When the Push Button is toggled, the data corresponding to the state of the Push Button is inserted into the Insert In range.

The Push Button is often used in conjunction with Dynamic Visibility to show and hide components. See “Dynamic Visibility” on page 306 for more information.

Most of the settings for push button selectors are common. This section lists settings unique to push button selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

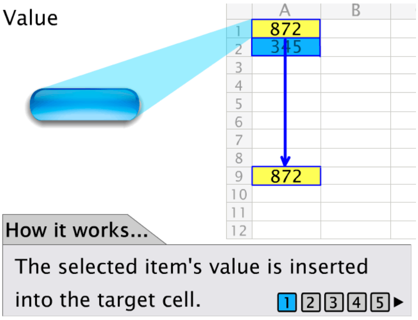
General

Insert Data

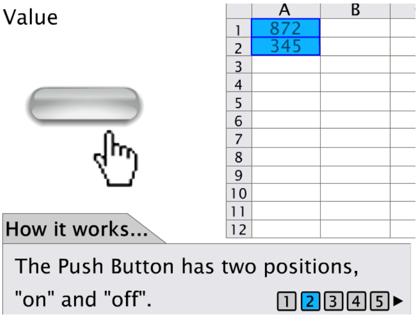
Use the options in this section to define how the Push Button component will behave when a selection is made. There are three parameters:

- **Insert Option -** the structure of the data that is inserted when a selection is made.

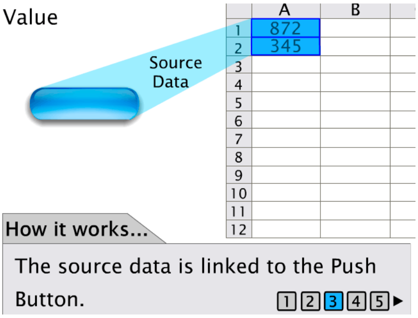
  This option is disabled for the push button component because “value” is the only valid option. The images on the next page show how the Insert option works with push buttons.



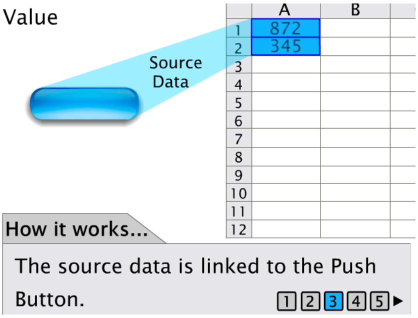
The selected item's value is inserted into the target cell.



The Push Button has two positions, "on" and "off".

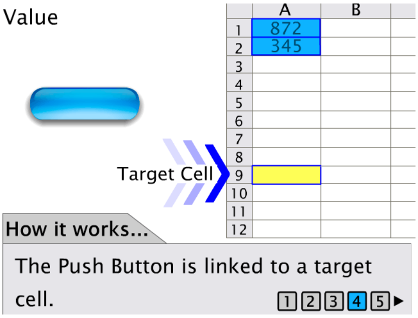


The source data is linked to the Push Button.



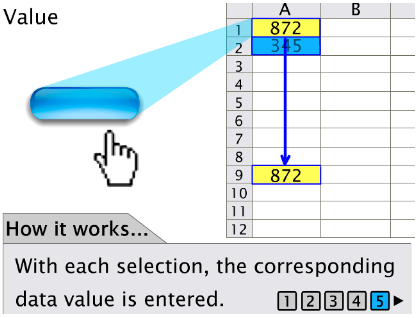
How it works...

The source data is linked to the Push Button.



How it works...

The Push Button is linked to a target cell.

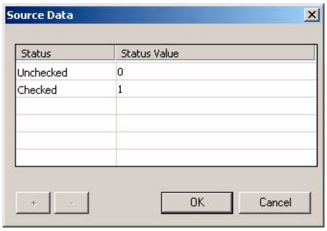


How it works...

With each selection, the corresponding data value is entered.

- **Source Data** - the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
    - Use Source Data (button shown in the margin) to select the source data from the spreadsheet.
    - Use Source Data manual entry (button shown in the margin) to display a popup window for manually entering the source data.

    - Use the Source Data popup window for manual entry of the source data.



Status	Status Value
Unchecked	0
Checked	1

- **Insert In -** the cell(s) into which the selected data is inserted.

  Use Insert In (button shown in the margin) to select the range from the spreadsheet into which the selected values will be inserted.

Behavior

Options

Use the options in this section to specify how the component responds to user interaction in the generated SWF file.

- **Sound Enabled**

  Check the Sound Enabled box to enable sound for the selected component.

- **Update On**

  Use Update On to define how the selected component recognizes that a selection has been made. Choose from the following:

    - **Mouse Click -** When selected, users must click on an item to select it.
    - **Mouse Over -** An item is selected when the pointer passes over it.

Default Options

Choose from either "On" or "Off" to specify the state that the Push Button should be in when the model is loaded. This option also determines which default data is inserted into the Insert In range when the model is loaded.

Appearance

Labels

Use the options in this section to configure the appearance of the labels for the selected component.

- **Alignment**

  Select the desired label alignment from the combo box. Choose from left, center, or right.

- **Show Labels**

  Select this option to display the labels on the selected component.

- **Font Settings**

  Use Font to configure the font for the labels. See the online help for more information.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

  If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

  See the online help for more information about numeric settings.

- **Mouse Over Text color**

  Use this option to set the text color that the label displays on a mouse over event.

  1. Click the color selection box to display the Color dialog box.

  2. Select a color from the palette and click OK.

- **Selected Text color**

  Use this option to set the text color that the label displays when the item is selected.

1. Click the color selection box to display the Color dialog box.

2. Select a color from the palette and click OK.

Transparency

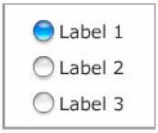
Use this option to configure the transparency of the selected Push Button component. The transparency parameter effects the entire component, including the label.

- **Transparency**

  Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 to 100, where 0 is completely transparent and 100 is completely opaque.

Unique Radio Button Options

A radio button is a standard user-interface component that allows users to select items from a set of buttons.



With each selection that is made, data corresponding to the selection is inserted into the Insert In range.

Like all Selectors, the Radio Button is often used to populate components with data or in conjunction with Dynamic Visibility to show and hide components. See “Dynamic Visibility” on page 306 for more information.

Most of the settings for radio button selectors are common. This section lists settings unique to radio button selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

General

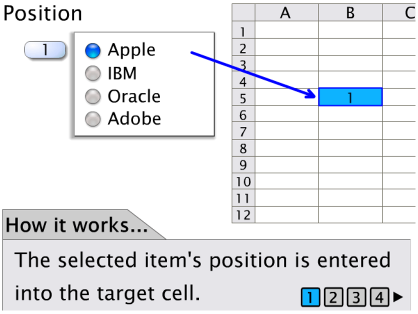
Insert Data

Use the options in this section to define how the Radio Button component will behave when a selection is made. There are three parameters:

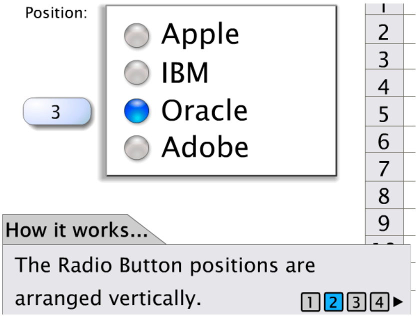
- **Insert Option -** the structure of the data that is inserted when a selection is made.
- **Source Data -** the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
- **Insert In -** the cell(s) into which the selected data is inserted.

Use this option to specify the structure of the data inserted when a selection is made. Radio buttons support the following insert options:

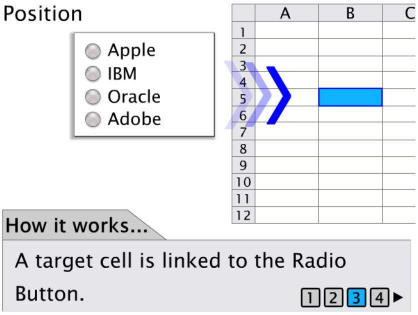
- **position**



The selected item's position is entered into the target cell.

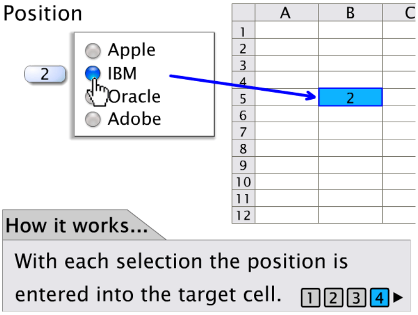


The Radio Button positions are arranged vertically.



How it works...

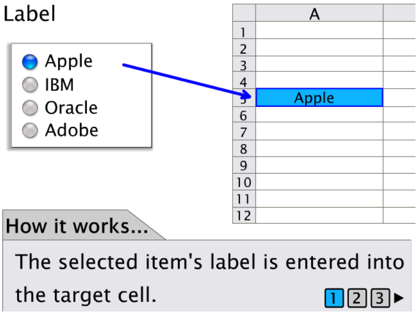
A target cell is linked to the Radio Button.



How it works...

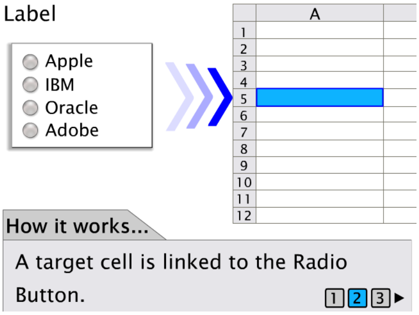
With each selection the position is entered into the target cell.

- **label**



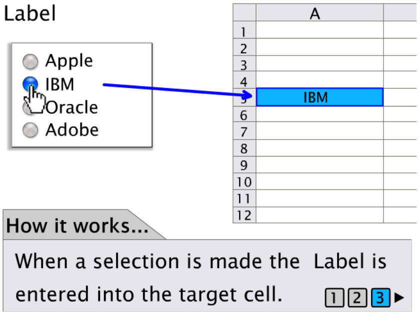
How it works...

The selected item's label is entered into the target cell.



How it works...

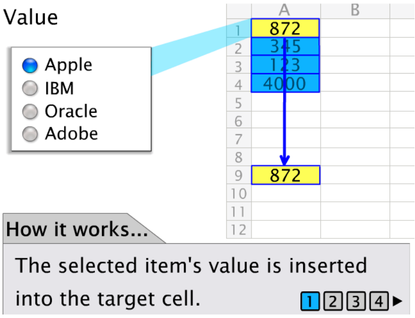
A target cell is linked to the Radio Button.



How it works...

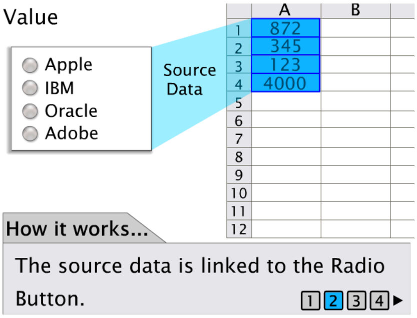
When a selection is made the Label is entered into the target cell.

- **value**



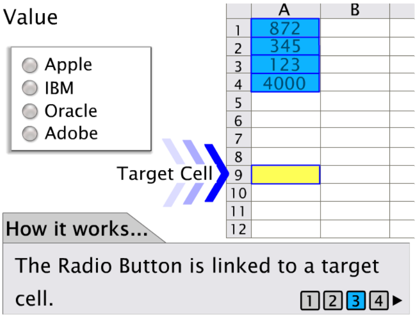
How it works...

The selected item's value is inserted into the target cell.



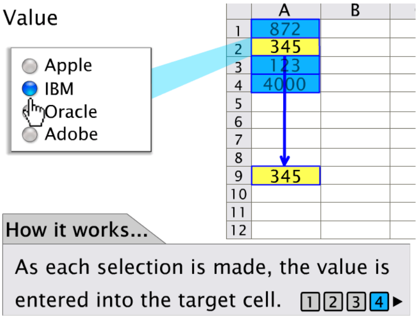
How it works...

The source data is linked to the Radio Button.



How it works...

The Radio Button is linked to a target cell.

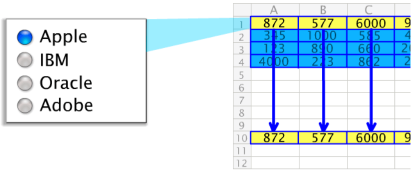


How it works...

As each selection is made, the value is entered into the target cell.

- **rows**

Row



● Apple
○ IBM
○ Oracle
○ Adobe

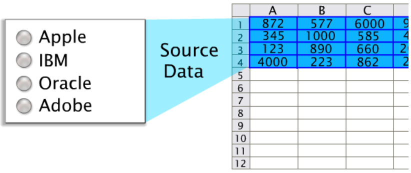
	A	B	C	
1	872	577	6000	9
2	345	1000	585	4
3	123	890	660	2
4	4000	223	862	2
5				
6				
7				
8				
9				
10	872	577	6000	9
11				
12				

How it works...

The selected item's data is inserted into the target row.

1 2 3 4 ▶

Row



○ Apple
○ IBM
○ Oracle
○ Adobe

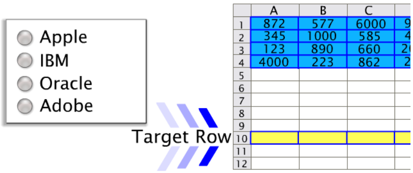
	A	B	C	
1	872	577	6000	9
2	345	1000	585	4
3	123	890	660	2
4	4000	223	862	2
5				
6				
7				
8				
9				
10				
11				
12				

How it works...

The source data is linked to the Radio Button

1 2 3 4 ▶

Row



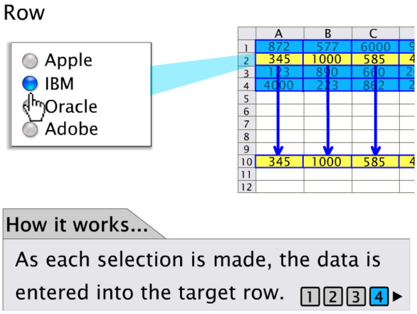
○ Apple
○ IBM
○ Oracle
○ Adobe

	A	B	C	
1	872	577	6000	9
2	345	1000	585	4
3	123	890	660	2
4	4000	223	862	2
5				
6				
7				
8				
9				
10				
11				
12				

How it works...

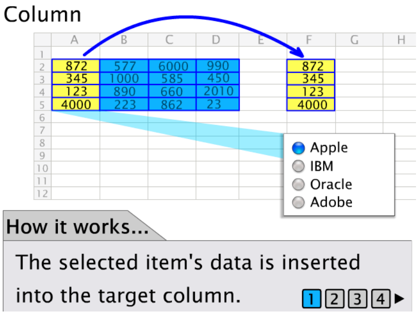
The Radio Button is linked to a target row.

1 2 3 4 ▶

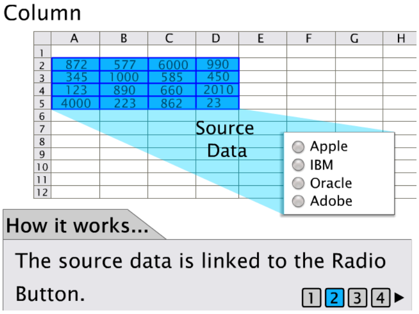


As each selection is made, the data is entered into the target row.

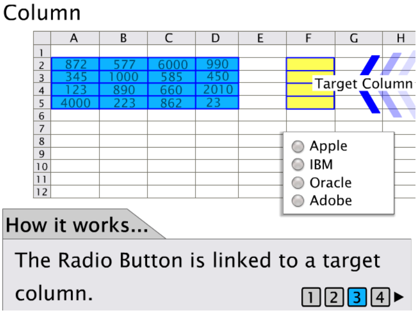
- **columns**



The selected item's data is inserted into the target column.



The source data is linked to the Radio Button.

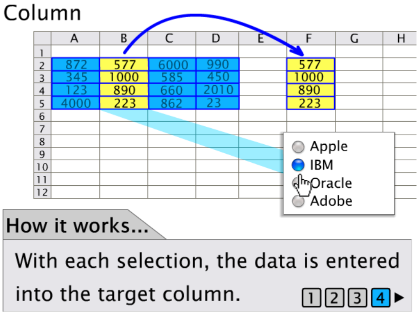


Column

	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990				
3	345	1000	585	450				
4	123	890	660	2010				
5	4000	223	862	23				

How it works...

The Radio Button is linked to a target column.



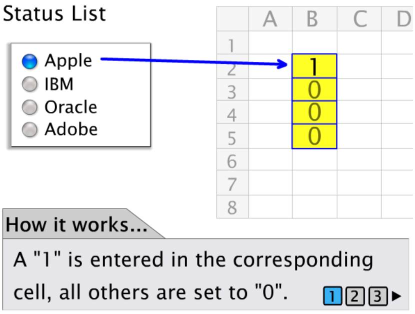
Column

	A	B	C	D	E	F	G	H
1								
2	872	577	6000	990		577		
3	345	1000	585	450		1000		
4	123	890	660	2010		890		
5	4000	223	862	23		223		

How it works...

With each selection, the data is entered into the target column.

- **status list**

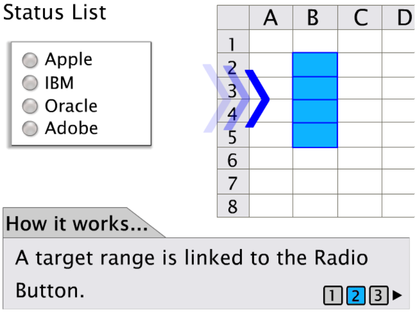


Status List

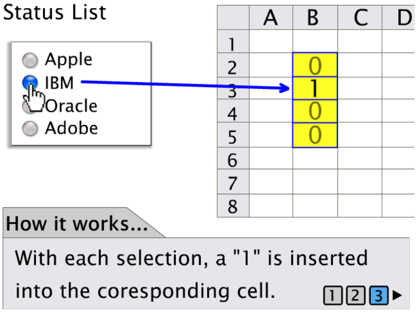
	A	B	C	D
1				
2		1		
3		0		
4		0		
5		0		
6				
7				
8				

How it works...

A "1" is entered in the corresponding cell, all others are set to "0".

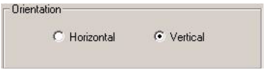


A target range is linked to the Radio Button.



With each selection, a "1" is inserted into the coresponding cell.

Orientation Use this section to control how the selectable elements of the component are arranged.



Orientation

○ Horizontal ● Vertical

- **Horizontal**

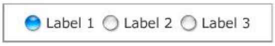
  Select this option to set the component orientation to horizontal.

- **Vertical**

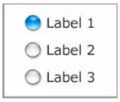
  Select this option to set the component orientation to vertical.

Example

Setting the orientation to horizontal for the Radio Button component results in the following:



Setting the orientation to vertical for the Radio Button component results in the following:



● Label 1
○ Label 2
○ Label 3

Behavior

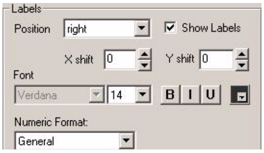
Default Options

Choose the label of the radio button that will be selected in the component when the model is loaded. This option also determines which default data is inserted into the Insert In range when the model is loaded.

Appearance

Labels

Use the options in this section to configure the appearance of the labels for the selected component.



Labels
Position: right
☑ Show Labels
X shift: 0
Y shift: 0
Font: Verdana 14 B I U
Numeric Format: General

- **Position**

  Select the desired position for the labels from the combo box. Available options may include top left, top center, top right, left, right, bottom left, bottom center, and bottom right.

- **Show Labels**

  Select this option to display the labels for the selected component.

- **X Shift**

  Shifts the labels to the left or right relative to the position specified in the Position parameter. Enter the desired x shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels to the right, negative values shift the labels to the left.

Enter the desired x shift in the text box, or use the up/down arrows to adjust the value.

- **Y Shift**

  Shifts the labels up or down relative to the position specified in the Position parameter. Enter the desired y shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels up, negative values shift the labels down.

  Enter the desired y shift in the text box, or use the up/down arrows to adjust the value.

- **Font Settings**

  Use Font to configure the font for the labels. See the online help for more information.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

  If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

  See the online help for more information about numeric settings.

Border Use the options in this section to configure the background and border appearance for the selected Radio Button component.

Note. If none of the Use Background Art, Show Border, or Show Fill options are selected, the radio buttons are displayed without a border or background.

- **Use Background Art**

  Select this option to use the default art for the background of the component. Selecting this option disables the border and fill parameters.

- **Show Border**

  Check this option to display a border around the radio buttons. Selecting this option disables the Use Background Art option and enables the Border Color and Weight options.

- **Border Color**

  Use this option to set the border color.

  1. Click the Border Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **Border Weight**

  Use this option to control the width of the border. Enter the desired weight in the text box, or use the up/down arrows to select a value from 1 to 100.

- **Show Fill**

  Check this option to display a background with a solid fill color behind the radio buttons. Selecting the this option disables the Use Background Art option and enables the Fill Color option.

- **Fill Color**

  Use this option to set the background fill color.

  1. Click the Fill Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **X-Margin**

  Use this option to control the width of the buffer around the radio buttons. Enter the desired x-margin in the text box, or use the up/down arrows to adjust the value.

- **Y-Margin**

  Use this option to control the height of the buffer around the radio buttons. Enter the desired y-margin in the text box, or use the up/down arrows to adjust the value.

- **Transparency**

  Use this option to control the transparency of the entire component. Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 (completely transparent) to 100 (completely opaque).

Unique Table Options

The Table component can be used both as a Display Component and as a Selector.

As a Display Component

As a Display Component, the Table is a graphic representation of a range of cells in the spreadsheet.

When the Display Data of the Table is linked to an Excel range, the Table displays the range almost exactly as it appears in the Excel file.

When a spreadsheet is re-imported and the Refresh Spreadsheet Format option is checked, Tables will re-inherit the look of their Display Data ranges.

As a Selector Component

The Table can also be used as a Selector. Each row in the Table can be pressed to insert corresponding values into the Insert In range.

Like all Selectors, the Table is often used to populate components with data or in conjunction with Dynamic Visibility to show and hide components. See “Dynamic Visibility” on page 306 for more information.

Most of the settings for table selectors are common. This section lists settings unique to table selectors. See the first part of the Selectors section, starting on page 304, or the online help for more information about common selector settings.

General

Display Data

Use this section to select the data that is displayed on the Table component.

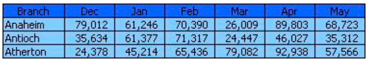
- **Display Data selection**

  Use this option to select the display data from the spreadsheet.

Example

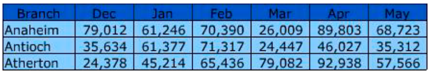
Selecting the Excel range shown in Figure A results in the table shown in Figure B.

Figure A



Branch	Dec	Jan	Feb	Mar	Apr	May
Anaheim	79,012	61,246	70,390	26,009	89,803	68,723
Antioch	35,634	61,377	71,317	24,447	46,027	35,312
Atherton	24,378	45,214	65,436	79,082	92,938	57,566

Figure B



Branch	Dec	Jan	Feb	Mar	Apr	May
Anaheim	79,012	61,246	70,390	26,009	89,803	68,723
Antioch	35,634	61,377	71,317	24,447	46,027	35,312
Atherton	24,378	45,214	65,436	79,082	92,938	57,566

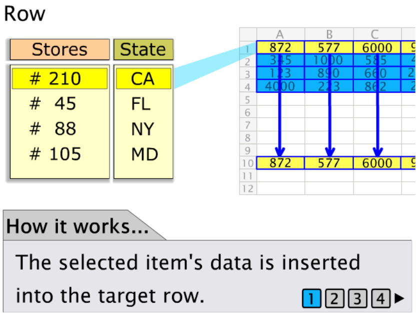
Insert Data

Use the options in this section to define how the Table Selector component will behave when a selection is made. There are three parameters:

- **Insert Option -** the structure of the data that is inserted when a selection is made.
- **Source Data -** the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.

- **Insert In -** the cell(s) into which the selected data is inserted.

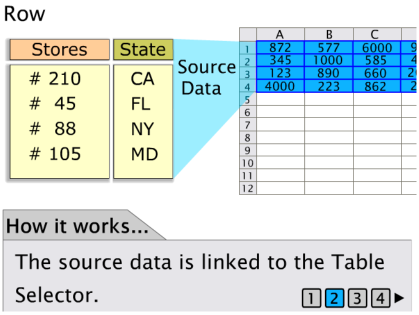
  This option is disabled because “Rows” is the only valid option. The images below show how the insert option works with tables:



Stores	State
# 210	CA
# 45	FL
# 88	NY
# 105	MD

	A	B	C
1	872	577	6000
2	345	1000	585
3	123	890	660
4	4000	223	862
5			
6			
7			
8			
9			
10	872	577	6000
11			
12			

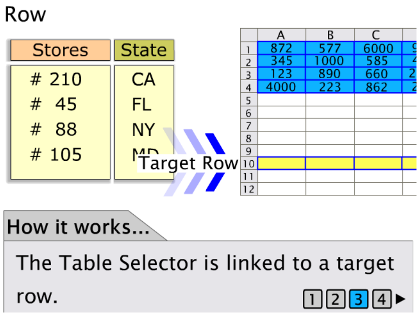
The selected item's data is inserted into the target row.



Stores	State
# 210	CA
# 45	FL
# 88	NY
# 105	MD

	A	B	C
1	872	577	6000
2	345	1000	585
3	123	890	660
4	4000	223	862
5			
6			
7			
8			
9			
10			
11			
12			

The source data is linked to the Table Selector.

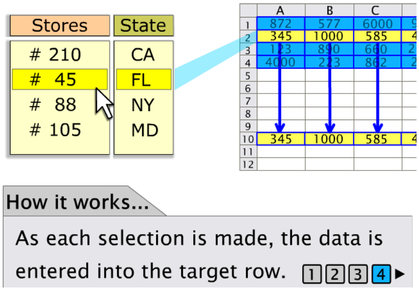


Stores	State
# 210	CA
# 45	FL
# 88	NY
# 105	MD

	A	B	C
1	872	577	6000
2	345	1000	585
3	123	890	660
4	4000	223	862
5			
6			
7			
8			
9			
10			
11			
12			

The Table Selector is linked to a target row.

Row



How it works...

As each selection is made, the data is entered into the target row.

Behavior

Options Use the options in this section to specify how the component responds to user interaction in the generated SWF file.

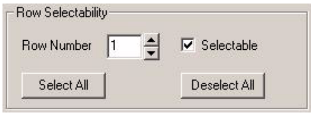
- **Update On**

  Use Update On to define how the selected component recognizes that a selection has been made. Choose from the following:

  - **Mouse Click -** When selected, users must click on an item to select it.
  - **Mouse Over -** An item is selected when the pointer passes over it.

Default Options Choose the row of the Table that will be selected when the model is loaded. This option also determines which default data is inserted into the Insert In range when the model is loaded.

Row Selectability Use the options in this section to configure whether the rows of a Table selector component are selectable.



Row Selectability

Row Number 1

☑ Selectable

- **Row Number**

  Enter the row number in the text box, or use the up/down arrows to select the row, to be used for the Selectable check box.

- **Selectable check box**

  Use this option to enable or disable row selection for the row displayed in the Row Number text box.

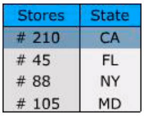
- **Select All**

  Use this option to **enable row selection** for all rows of the table.

- **Deselect All**

  Use this option to **disable row selection** for all rows of the table.

Example



Stores	State
# 210	CA
# 45	FL
# 88	NY
# 105	MD

You may choose to define the header of a table such that it is not selectable. You can disable the Selectable box for Row 1, in the example above, since there is no need to select that row.

Appearance

Grid

Use this option to enable the grid display for the Table component.

Note. Selecting the Show Grid option only displays a grid for cells that do not have a cell border or a cell pattern specified in Excel.

- **Show Grid**

  Select this option to enable the grid display for the selected component. Selecting this option enables the Grid Color parameter.

- **Grid Color**

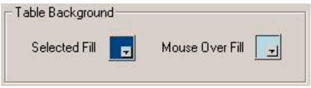
  Use this option to set the grid color.

  1. Click the Grid Color box to display the Color dialog box.

2. Select a color from the palette and click OK.

Table Background

Use the options in this section to configure the colors of the highlights used to show selected rows and rows that the mouse pointer is over.



- **Selected Fill**

  Use this option to set the Selected Fill color of the table. This color will be overlayed above rows when they are selected. In order to keep spreadsheet cell colors from being hidden by the selection, the selection color is partially transparent.

  1. Click the **Selected Fill** box to display the Color dialog box.
  2. Select a color from the pallette and click **OK**.

- **Mouse Over Fill**

  Use this option to set the Mouse Over Fill color of the table. This color will be overlayed above rows when the mouse pointer is over them. In order to keep spreadsheet cell colors from being hidden by the mouse over, the mouse over color is partially transparent.

  1. Click the **Mouse Over Fill** box to display the Color dialog box.
  2. Select a color from the pallette and click **OK**.

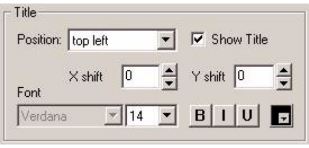
Single Values

This section provides information about the controls available for Xcelsius single value components. The common elements are discussed first, with unique control elements listed by single value component type at the end of the section.

General

Title

Use the options in this section to set the title for the selected component.



Title

Position: top left

☑ Show Title

X shift 0

Y shift 0

Font

Verdana

14

Title settings do not apply to Labels.

Title text box

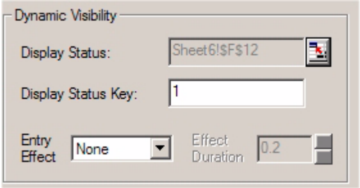
Use this option to manually enter the title for the component.

Title selection

Use this option to select the title from the spreadsheet.

Behavior

Dynamic Visibility



Dynamic Visibility

Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.

- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Example To control visibility, the component is linked to a cell in the spreadsheet via the Display Status parameter. When the value of the cell matches the Display Status Key, the component will be visible. Otherwise, the component will be hidden.

Tip. You can combine two components to add sizzle and create truly cutting-edge models. For example, you can add a Push Button to display a specific chart. The Push Button can be configured to toggle between inserting "showChart" and "hideChart" into a cell when it is selected. By linking the chart to this destination cell and setting the Chart's Display Status Key to "showChart", the Chart becomes visible when the Push Button inserts the value "showChart" and hidden when the Push Button inserts "hideChart".

You may want to switch between a number of components. To accomplish this, use the Display Status Key and a Selector. For example, a model might need to toggle between different charts. To achieve this, give each chart a unique Display Status Key, such as "chart1", "chart2", etc. A list box with Source Data that matches the Display Status Keys can then insert into a cell the Display Status of every chart to which it is linked. As the list box value is inserted into the cell, the corresponding chart is made visible, while the others are hidden.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Play Options

Use these options to control the characteristics of the play button. The play button can be used to automatically play through the component's range. Using the behavior options, you can control how long it takes to play across the range as well as what behavior will occur when the play button reaches the end of the range.

Note. If the Upper Limit Behavior of the component is open, the play button continues to increase the value until it is stopped, and the Auto Rewind and Auto Replay parameters are disabled.

The Play Button requires a unique set of play options. See “Unique Play Button Settings” on page 392

Show Play Button Select this option to attach a play button to the component.

Auto Rewind Select this option to enable the auto rewind behavior of the play button. With this option enabled the play button will automatically rewind itself after reaching the end of the play sequence.

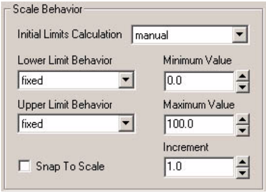
Auto Replay Select this option to enable the auto replay behavior of the play button. With this option enabled the component will loop through the play sequence until it is manually stopped.

Play Time Enter the desired play time in the text box, or use the up/down arrows to select a value from 1 (plays sequence fastest) to 100 (plays sequence slowest).

Sound Enabled Check the Sound Enabled box to enable sound for the selected component.

Scale Behavior

Use this section to define the behavior of lower and upper limits.



Initial Limits Calculation: manual

Lower Limit Behavior: fixed

Minimum Value: 0.0

Upper Limit Behavior: fixed

Maximum Value: 100.0

Increment: 1.0

☐ Snap To Scale

You can use limits to prevent component values from being set manually. Limits can also determine the scale of the component; distant limits allow the component to take on a wider range of values, while closer limits allow more granular manipulation of the value.

Scale behavior does not apply to Labels.

Initial Limits Calculation

The initial value of the component is often unknown at author time and can vary greatly. The Initial Limits Calculation provides several methods for calculating the component limits that can ensure the initial value is within the limits:

- **Manual** - The limits will be determined by the Minimum and Maximum Values set by you.
- **Value Based** - The limits will comprise a tight range around the value.
- **Zero Based** - The limits will comprise a range that includes the value, and will have zero as either the Upper or Lower limit.
- **Zero Centered** - The limits will comprise a range that includes the value, and will be centered around zero.
- **Alert Based** - The limits will comprise a range that covers all alert levels.

The following single value components do not use this setting:

- Play Button
- Value

Lower Limit Behavior	Use this option to set the Lower Limit Behavior for the component. Choose from the following: • **Fixed -** The user cannot set the value to a number less than the Minimum Value. • **Adjustable -** The user can adjust the Lower Limit at runtime. This setting does not apply to Value single value components. • **Open -** The user can set the value to any number that does not conflict with the Upper Limit. The following single value components do not use this setting: • Play Button
Upper Limit Behavior	Use this option to set the Upper Limit Behavior for the component. Choose from the following: • **Fixed -** The user cannot set the value to a number greater than the Maximum Value. • **Adjustable -** The user can adjust the Upper Limit at runtime. This setting does not apply to Value single value components. • **Open -** The user can set the value to any number that does not conflict with the Lower Limit. The following single value components do not use this setting: • Play Button
Minimum Value	Minimum Value is the Lower Limit and is available only when the Lower Limit Behavior is not open. Enter the desired value in the text box, or use the up/down arrows to adjust the value.
Maximum Value	Maximum Value is the Upper Limit and is available only when the Upper Limit Behavior is not open. Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Increment

Use this option to round component values that are manually set. Enter the desired value in the text box, or use the up/down arrows to adjust the value. With this option you can restrict input for quantities that require specific increments, such as dozens.

You can also make numbers more readable by using the Increment to round to a specific digit.

Snap To Scale

Select the Snap To Scale check box to force the graphical representation of the component to match the value.

The following single value components do not use this setting:

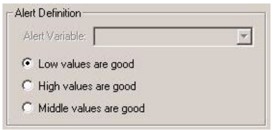
- Play Button
- Value

Alerts

All single value component except Labels and Play Buttons support Alerts.

Alert Definition

With this group of parameters, you can select one of three ways to calculate the visual indicator status or alert colors/levels. For multi-dimensional components like Bubble or XY Charts, you can also select the variable/axis used to determine the alert color.



Alert Definition

Alert Variable:

● Low values are good

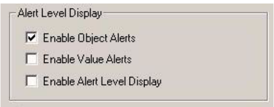
○ High values are good

○ Middle values are good

Each method is based on a different way to measure the performance of the actual values against the target values. See "How to Use Alerts" on page 164 for more information.

Alert Level Display

This section contains features that apply to most single value components. By using all, or any of them, you can add interesting features that will enhance the visual effect of using alerts.



Alert Level Display

☑ Enable Object Alerts

☐ Enable Value Alerts

☐ Enable Alert Level Display

Alert Level Display settings do not apply to Value controls.

- **Enable Object Alerts**

  Activates the alert color display on the component.

- **Enable Value Alerts**

  Activates a value box around the component value that displays the current alert color.

- **Enable Alert Level Display**

  Activates a graphic representation of the alert limits, allowing you to see how close the current value is to the alert limits as the current value changes.

Alert Levels

You can use Alert levels to define the number of alert colors, the percentages or ranges for each color, and the type of color to be used on each level.

The colors are represented on the alert control panel depending on the selected alert method.

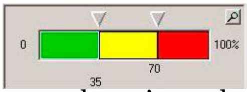
Each alert color has a range that is easily selected by moving the color picker slider on the color alert panel.

Number of colors

Number of colors: 3

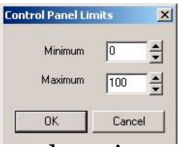
You can specify from two to 10 alert colors using the up/down arrows. New alert colors are added in gray to the left or right of the alert control panel, depending on the selected alert method.

Alert Colors



To adjust the percentages that trigger the alert colors, drag the gray arrows on top of the alert colors selector.

Control Panel Limits



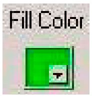
Minimum: 0
Maximum: 100

To adjust the minimum and maximum percentage limits displayed on the alert colors selector, use the up/down arrows or type the required value.

Fill Color

You can change any alert color:

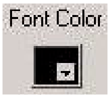
1. On the alert color selector, select the color to be changed by clicking on it.



2. Click the button shown in the margin to assign a new alert color to the selected range.

Font Color

In certain components you can change the font color for the value alert display when the Enable Value Alerts checkbox is selected.



1. Select the font color range in the Alert Color selector by clicking on it.
2. Click the button shown in the margin to assign the new font color.

No Data

You can define the alert color that appears when any of the required values to calculate the alert color is missing. For example, if the target or actual value is missing for an alert level, the No Data color can appear instead of the color that was set using the Alert Color selector.

Enable Alerts

Use this option to activate a visual indicator of performance status for the selected component. This visual status uses customized colors. For example, Green might represent acceptable performance, while Red might indicate poor performance. Colors are generated by comparing actual values against target values.

You can customize alert levels, the number of colors, the type of colors, and specific alert features to provide the maximum amount of flexibility for each component.

☑ Enable Alerts

To enable alerts, check the Enable Alerts check box.

Target

With the Target text box you can set the target data used to trigger the alert colors. With the Target selection option, you can select a cell so that actual data can be compared to the selected target.

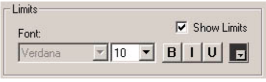
The target text box is available in the grid and all single value components that have the Alert tab enabled (dial, gauge, value, progress bars, and sliders). This option lets you manually enter the alert target value for the component.

The target selection button (shown in the margin) lets you select the alert target data from the spreadsheet.

Appearance

Limits

Use the options in this section to configure the appearance of the limits for the selected component.



Limits

☑ Show Limits

Font: Verdana 10

These settings do not apply to the following single value components:

- Label
- Play Button
- Value

Show Limits Select this check box to display the Lower and Upper Limits on the component.

Font Settings Use Font to configure the font for the limits. See the online help for more information.

Title

With the options in this section you can configure the appearance of the title for the selected component.

These options do not apply to the following single value components:

- Label

Position Positions the title. Choose from the available options, which may include: top left, top center, top right, left, right, bottom left, bottom center, bottom right.

Show Title Displays the title on the selected component.

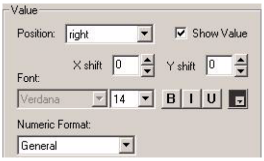
X Shift Shifts the labels to the left or right relative to the position specified in the Position parameter. Enter the desired x shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels to the right, negative values shift the labels to the left.

Y Shift Shifts the labels up or down relative to the position specified in the Position parameter. Enter the desired y shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels up, negative values shift the labels down.

Font Settings Configures the font for the title text. See the online help for more information.

Value

Use the options in this section to configure the appearance of the value label for the selected component.



Value

Position: right

☑ Show Value

X shift 0

Y shift 0

Font: Verdana 14

Numeric Format: General

Position	Select the desired position for the value from the combo box. The following options may be available: top left, top center, top right, left, center, right, bottom left, bottom center, or bottom right.
Show Value	Select this option to display the value label on the selected component.
X Shift	Shifts the labels to the left or right relative to the position specified in the Position parameter. Enter the desired x shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels to the right, negative values shift the labels to the left. Enter the desired x shift in the text box, or use the up/down arrows to adjust the value.
Y Shift	Shifts the labels up or down relative to the position specified in the Position parameter. Enter the desired y shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels up, negative values shift the labels down. Enter the desired y shift in the text box, or use the up/down arrows to adjust the value.
Font Settings	Use Font to configure the font used for the value. See the online help for more information.
Numeric Format	With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel. If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”. See the online help for more information about numeric settings.

Unique Dial Settings

Like all Single Value Components, the Dial can be used to display or adjust the numeric value of a cell.

Users can interact with the Dial to adjust its value in one of two ways:

- With Mouse Tracking set to Vertical, the value can be changed by clicking on the Dial and dragging the mouse up or down.
- With Mouse Tracking set to Radial, the value can be changed by clicking on the Dial and dragging the mouse radially around the Dial.

The "open" Limit Behavior options of the Dial make it useful for allowing input in which there are no limits.

Most of the settings for dials are common. This section lists settings unique to dials. See the first part of the Single Value section, starting on page 373, or the online help for more information about common single value settings.

General

Data

Use this section to link the component to a value.

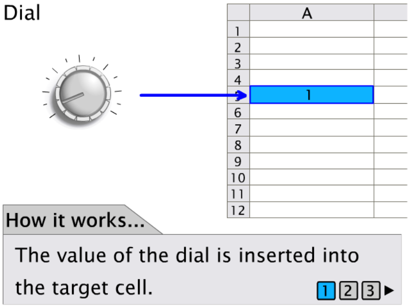
- **Data text box**

  Use this option to manually enter the data for the component.

- **Link to Cell selection**

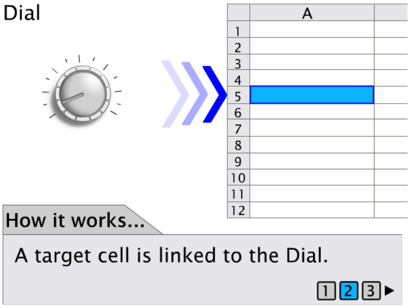
  Use this option (shown in the margin) to select the data from the spreadsheet. Any change to the value of this cell will be reflected in the component. Similarly, any change to the value of the component will be reflected across all other components linked to this cell.

How It Works



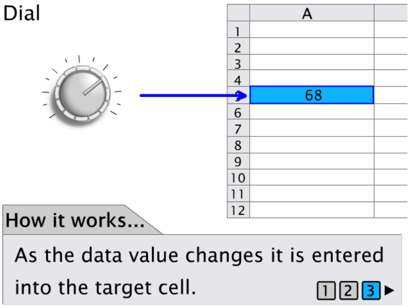
How it works...

The value of the dial is inserted into the target cell.



How it works...

A target cell is linked to the Dial.

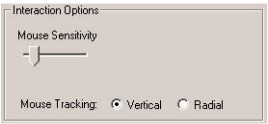


How it works...

As the data value changes it is entered into the target cell.

Behavior

Interaction Use the options in this section to control how the component value is modified.



Interaction Options

Mouse Sensitivity

Mouse Tracking: ● Vertical ○ Radial

- **Mouse Sensitivity**

  Use this setting to determine how sensitive the value of the component is to pointer movements. Higher sensitivity settings are beneficial when the value of the component must span a large range, while lower settings permit more granular manipulation of the value.

- **Mouse Tracking Vertical**

  Select this option to control the value of the component by moving the pointer up or down.

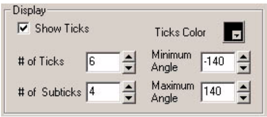
- **Mouse Tracking Radial**

  Select this option to control the value of the component by moving the pointer radially around the component.

Appearance

Display

Use the options in this section to fine-tune the look of the component.



Display

☑ Show Ticks

Ticks Color

# of Ticks: 6

# of Subticks: 4

Minimum Angle: -140

Maximum Angle: 140

- **Show Ticks**

  Select the Show Ticks check box to display tick marks along the component.

- **# of Ticks**

  Enter the desired value in the text box, or use the up/down arrows to adjust the number of major tick marks.

- **# of Subticks**

  Enter the desired value in the text box, or use the up/down arrows to adjust the number of minor tick marks between each major tick mark.

- **Ticks Color**

  Use this option to change the color of the tick marks.

1. Click the Ticks Color box to display the Color dialog.
2. Select a color from the palette and click OK.

- **Minimum Angle**

  Use this value to specify the minimum angle to which the component object can rotate. Enter the desired value in the text box, or use the up/down arrows to adjust the value. This option is not available when the Lower Limit Behavior is open.

- **Maximum Angle**

  Use this value to specify the maximum angle to which the component object can rotate. Enter the desired value in the text box, or use the up/down arrows to adjust the value. This option is not available when the Upper Limit Behavior is open.

Unique Gauge Settings

Like all Single Value Components, the Gauge can be used to display or adjust the numeric value of a cell.

Users can interact with the Gauge to adjust its value in one of two ways:

- With Mouse Tracking set to Vertical, the value can be changed by clicking on the Gauge and dragging the mouse up or down.
- With Mouse Tracking set to Radial, the value can be changed by clicking on the Gauge and dragging the mouse radially around the Gauge.

The "open" Limit Behavior options of the Gauge make it useful for allowing input in which there are no limits.

Most of the settings for gauges are common. This section lists settings unique to gauges. See the first part of the Single Value section, starting on page 373, or the online help for more information about common single value settings.

General

Data Use this section to link the component to a value.

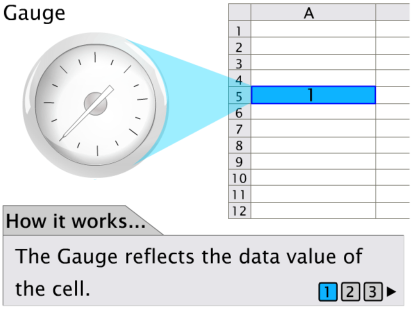
- **Data text box**

  Use this option to manually enter the data for the component.

- **Link to Cell selection**

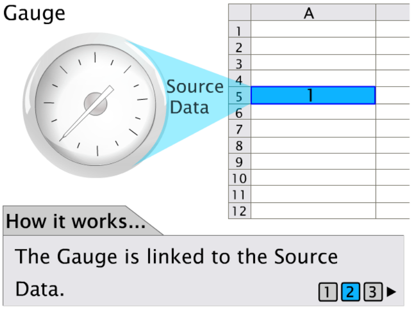
  Use this option (shown in the margin) to select the data from the spreadsheet. Any change to the value of this cell will be reflected in the component. Similarly, any change to the value of the component will be reflected across all other components linked to this cell.

How It Works



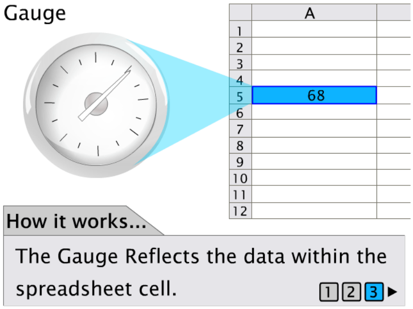
How it works...

The Gauge reflects the data value of the cell.



How it works...

The Gauge is linked to the Source Data.

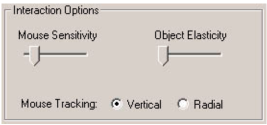


How it works...

The Gauge Reflects the data within the spreadsheet cell.

Behavior

Interaction Use the options in this section to control how the component value is modified.



Mouse Tracking: ● Vertical ○ Radial

- **Mouse Sensitivity**

  Use this setting to determine how sensitive the value of the component is to pointer movements. Higher sensitivity settings are beneficial when the value of the component must span a large range, while lower settings permit more granular manipulation of the value.

- **Mouse Tracking Vertical**

  Select this option to control the value of the component by moving the pointer up or down.

- **Mouse Tracking Radial**

  Select this option to control the value of the component by moving the pointer radially around the component.

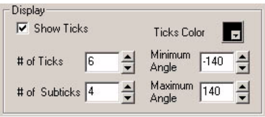
- **Object Elasticity**

  Use this setting to determine how much elasticity will exist in the movement of the needle.

Appearance

Display

Use the options in this section to fine-tune the look of the component.



Display

☑ Show Ticks

Ticks Color

# of Ticks 6

Minimum Angle -140

# of Subticks 4

Maximum Angle 140

- **Show Ticks**

  Select the Show Ticks check box to display tick marks along the component.

- **# of Ticks**

  Enter the desired value in the text box, or use the up/down arrows to adjust the number of major tick marks.

- **# of Subticks**

  Enter the desired value in the text box, or use the up/down arrows to adjust the number of minor tick marks between each major tick mark.

- **Ticks Color**

  Use this option to change the color of the tick marks.

  1. Click the Ticks Color box to display the Color dialog.

  2. Select a color from the palette and click OK.

- **Minimum Angle**

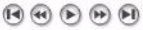
  Use this value to specify the minimum angle to which the component object can rotate. Enter the desired value in the text box, or use the up/down arrows to adjust the value. This option is not available when the Lower Limit Behavior is open.

- **Maximum Angle**

  Use this value to specify the maximum angle to which the component object can rotate. Enter the desired value in the text box, or use the up/down arrows to adjust the value. This option is not available when the Upper Limit Behavior is open.

Unique Play Button Settings

Like all Single Value Components, the Play Button can be used to display or adjust the numeric value of a cell.



There are a number of different ways that users can interact with the play component to adjust its value:

- The play button can be pressed to automatically play through the range of values. While the value is "playing", the pause button can be pressed to stop playing.
- The Rew/FWD buttons (when enabled) can also be pressed and held to quickly decrease or increase the value.
- The Prev/Next buttons (when enabled) can also be pressed to decrease or increase the value one increment at a time. Holding down the Prev/Next buttons will continue to decrease or increase the value.
- The slider (when enabled) can also be dragged back and forth to adjust the value.

Most of the settings for play buttons are common. This section lists settings unique to play buttons. See the first part of the Single Value section, starting on page 373, or the online help for more information about common single value settings.

General

Data

Use this section to link the component to a value.

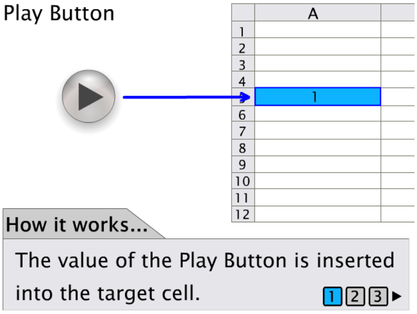
- **Data text box**

  Use this option to manually enter the data for the component.

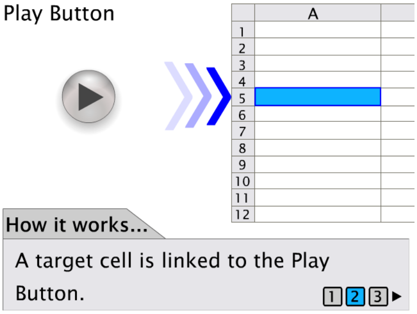
- **Link to Cell selection**

  Use this option (shown in the margin) to select the data from the spreadsheet. Any change to the value of this cell will be reflected in the component. Similarly, any change to the value of the component will be reflected across all other components linked to this cell.

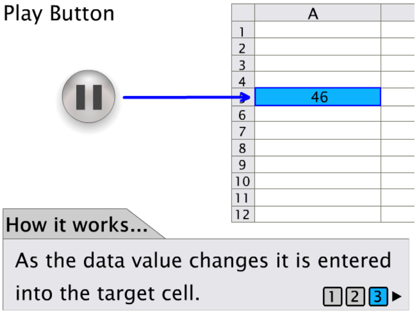
How It Works



The value of the Play Button is inserted into the target cell.



A target cell is linked to the Play Button.

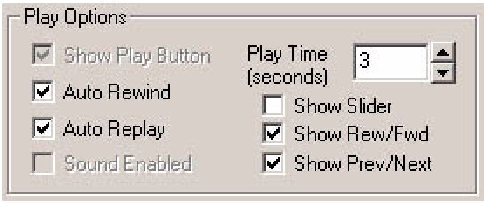


As the data value changes it is entered into the target cell.

Behavior

Play Options

Use these options to control the characteristics of the play component. The play component can be used to automatically play through a range of values. Using the behavior options, you can control how long the play component runs, and determine the play options enabled on the play component at run time.



Play Options

☑ Show Play Button
☑ Auto Rewind
☑ Auto Replay
☐ Sound Enabled
Play Time (seconds) 3
☐ Show Slider
☑ Show Rew/Fwd
☑ Show Prev/Next

You can set two types of behavior for the Play Component:

- User Interaction Options - These options add or delete buttons which you can use to control play behavior at run time. Options include the slider that controls the progress of the movie, the rewind and fast forward buttons, and the previous and next buttons.
- Run Time Behavior - These options control the way the play component plays at run time. Options include play time, auto rewind, and auto replay.

- **Auto Rewind**

  Select this option to enable the auto rewind behavior of the play button. With this option enabled the play button will automatically rewind itself after reaching the end of the play sequence.

- **Auto Replay**

  Select this option to enable the auto replay behavior of the play button. With this option enabled the component will loop through the play sequence until it is manually stopped.

- **Play Time**

  Enter the desired play time in the text box, or use the up/down arrows to select a value from 1 (plays sequence fastest) to 100 (plays sequence slowest).

- **Show Slider**

  Select this option to enable the slider on the play component. The slider provides a visual representation of the progress and duration of the play sequence. You can also drag the slider to manually navigate through the data in the play selector.

- **Show Rew/Fwd**

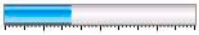
  Select this option to display the rewind and fast forward buttons on the play selector. These buttons advance or rewind the sequence at a faster rate than the play component.

- **Show Prev/Next**

  Select this option to display the previous and next buttons on the play selector. These buttons advance the sequence to the next row or column, depending on the insert option.

Unique Progress Bar Settings

Like all Single Value Components, the Dial can be used to display or adjust the numeric value of a cell.



Users can interact with the Progress bar by clicking and dragging the bar. In the Horizontal Progress Bar, the mouse should be dragged left or right. In the Vertical Progress Bar, the mouse should be dragged up or down.

Most of the settings for progress bars are common. This section lists settings unique to progress bars. See the first part of the Single Value section, starting on page 373, or the online help for more information about common single value settings.

General

Data Use this section to link the component to a value.

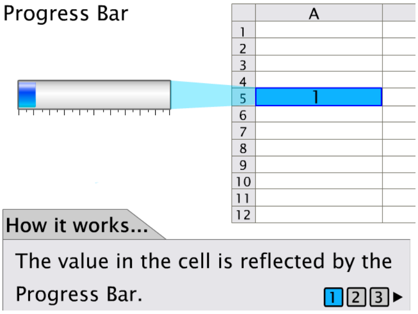
- **Data text box**

  Use this option to manually enter the data for the component.

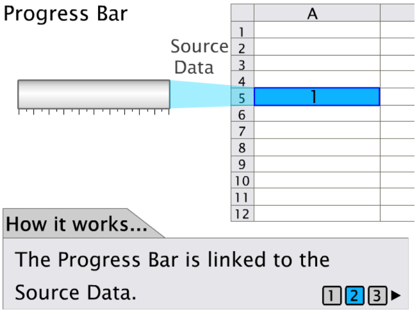
- **Link to Cell selection**

  Use this option (shown in the margin) to select the data from the spreadsheet. Any change to the value of this cell will be reflected in the component. Similarly, any change to the value of the component will be reflected across all other components linked to this cell.

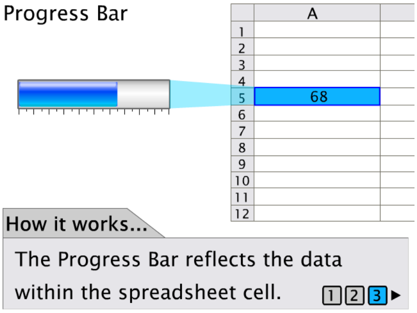
How It Works



The value in the cell is reflected by the Progress Bar.



The Progress Bar is linked to the Source Data.



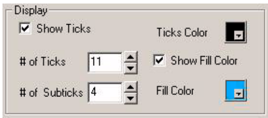
Progress Bar

How it works...

The Progress Bar reflects the data within the spreadsheet cell.

Appearance

Display Use the parameters in this section to fine-tune the look of the component.



Display

☑ Show Ticks

Ticks Color

# of Ticks 11

☑ Show Fill Color

# of Subticks 4

Fill Color

- **Show Ticks**

  Select the Show Ticks check box to display tick marks along the component.

- **# of Ticks**

  Enter the desired value in the text box, or use the up/down arrows to adjust the number of major tick marks.

- **# of Subticks**

  Enter the desired value in the text box, or use the up/down arrows to adjust the number of minor tick marks between each major tick mark.

- **Ticks Color**

  Use this option to change the color of the tick marks.

  1. Click the Ticks Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **Show Fill Color**

  Select the Show Fill Color check box to change the color of the component object to the Fill Color.

Note. This option is available only when alerts are disabled.

- **Fill Color**

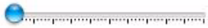
  Use this option to change the color of the component object when the Show Fill Color option has been selected. You can achieve a variety of different looks by adjusting this color.

  1. Click the Default Color box to display the Color dialog box.
  2. Select a color from the pallet and click OK.

Note. This option is available only when alerts are disabled.

Unique Slider Settings

Like all Single Value Components, the Slider can be used to display or adjust the numeric value of a cell.



Users can interact with the Slider by clicking and dragging the thumb piece. In the Horizontal Slider, the mouse should be dragged left or right. In the Vertical Slider, the mouse should be dragged up or down. The gutter that the thumb piece slides in can also be clicked on to quickly change the value to the value corresponding to that point along the Slider.

Most of the settings for sliders are common. This section lists settings unique to sliders. See the first part of the Single Value section, starting on page 373, or the online help for more information about common single value settings.

General

Data Use this section to link the component to a value.

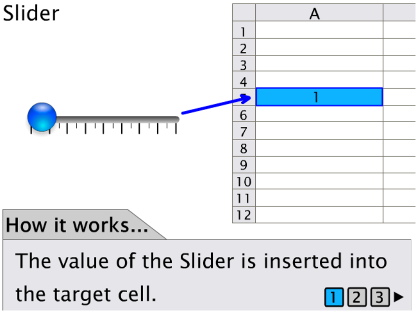
- **Data text box**

  Use this option to manually enter the data for the component.

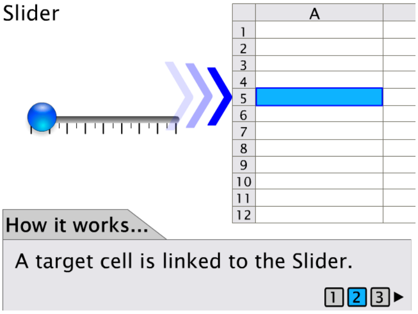
- **Link to Cell selection**

  Use this option (shown in the margin) to select the data from the spreadsheet. Any change to the value of this cell will be reflected in the component. Similarly, any change to the value of the component will be reflected across all other components linked to this cell.

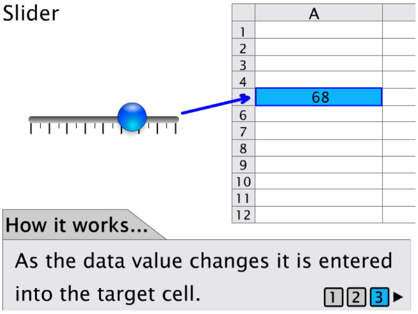
How It Works



The value of the Slider is inserted into the target cell.



A target cell is linked to the Slider.

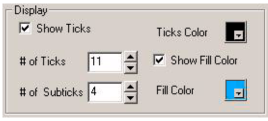


As the data value changes it is entered into the target cell.

Appearance

Display

Use the parameters in this section to fine-tune the look of the component.



Display

☑ Show Ticks

Ticks Color

# of Ticks 11

☑ Show Fill Color

# of Subticks 4

Fill Color

- **Show Ticks**

  Select the Show Ticks check box to display tick marks along the component.

- **# of Ticks**

  Enter the desired value in the text box, or use the up/down arrows to adjust the number of major tick marks.

- **# of Subticks**

  Enter the desired value in the text box, or use the up/down arrows to adjust the number of minor tick marks between each major tick mark.

- **Ticks Color**

  Use this option to change the color of the tick marks.

  1. Click the Ticks Color box to display the Color dialog box.
  2. Select a color from the palette and click OK.

- **Show Fill Color**

  Select the Show Fill Color check box to change the color of the component object to the Fill Color.

Note. This option is available only when alerts are disabled.

- **Fill Color**

  Use this option to change the color of the component object when the Show Fill Color option has been selected. You can achieve a variety of different looks by adjusting this color.

  1. Click the Default Color box to display the Color dialog box.

  2. Select a color from the pallet and click OK.

Note. This option is available only when alerts are disabled.

Unique Value Settings

Like all Single Value Components, the Value can be used to display or adjust the numeric value of a cell.

Users can interact with the Value component to adjust its value in various ways:

- With Scroll Behavior set to Manual, the value can be changed by clicking and dragging the mouse up or down.
- With Scroll Behavior set to Auto, the value will automatically and continually be changed as long as teh mouse button is pressed. If the mouse is above the component, the value increases. If the mouse is below the component, the value decreases.
- By double-clicking the Value, a number can be typed into the display.

The "open" Limit Behavior options of the Value make it useful for allowing input in which there are no limits.

Most of the settings for values are common. This section lists settings unique to values. See the first part of the Single Value section, starting on page 373, or the online help for more information about common single value settings.

General

Data

Use this section to link the component to a value.

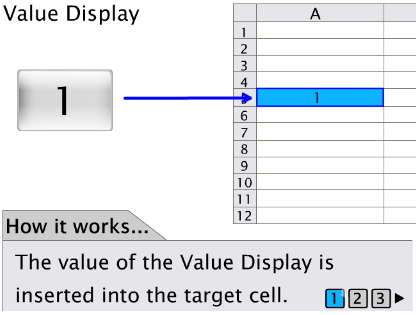
- **Data text box**

  Use this option to manually enter the data for the component.

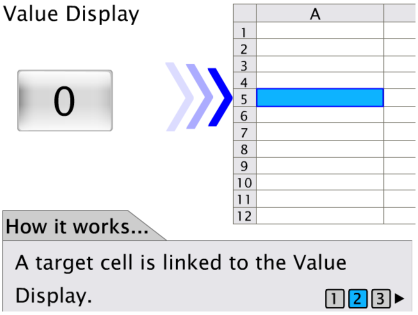
- **Link to Cell selection**

  Use this option (shown in the margin) to select the data from the spreadsheet. Any change to the value of this cell will be reflected in the component. Similarly, any change to the value of the component will be reflected across all other components linked to this cell.

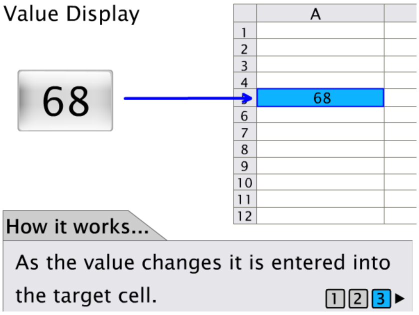
How It Works



The value of the Value Display is inserted into the target cell.



A target cell is linked to the Value Display.



As the value changes it is entered into the target cell.

Behavior

Interaction

Use the options in this section to control how the component value is modified.

- **Mouse Sensitivity**

  Use this setting to determine how sensitive the value of the component is to pointer movements. Higher sensitivity settings are beneficial when the value of the component needs to span a large range, while lower settings permit more granular manipulation of the value.

- **Autoresize Value Box**

  Select the Autoresize Value Box check box to enable the component to automatically resize to fit the number displayed.

- **Scroll Behavior**

  Use the Scroll Behavior options to specify how users will adjust the value of the component.

  - **Manual**
    The value of the component will be controlled by manually dragging the mouse. When the mouse is dragged up or down, the value is adjusted by an amount approximate to the distance dragged. Dragging up increases the value of the component. Dragging down decreases the value of the component.
  - **Automatic**
    The value of the component will be controlled by dragging and holding the mouse above or below the value display. The value will automatically and continually be adjusted as long as the mouse button remains down. If the mouse is above the component, the value increases. If the mouse is below the component, the value decreases. The farther away the mouse is from the value display, the faster the value will change.

Appearance

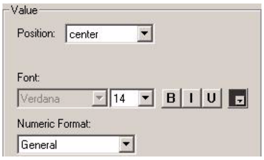
Display

- **Show Background**

Select this check box to show a background behind the value. The size of the interactive elements of the value do not change.

Value

Use the options in this section to configure the appearance of the value label for the selected component.



Value
Position: center
Font: Verdana 14
Numeric Format: General

- **Position**

  Select the desired position for the value from the combo box. Choose from left, center, or right.

- **Font Settings**

  Use Font to configure the font used for the value. See the online help for more information.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

  If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

  See the online help for more information about numeric settings.

Collaboration

See “Using Collaboration” on page 209 for information on configuring your model to work with the collaboration components.

Note. This component is only available in the Professional Edition of Xcelsius.

Connection Light

The Connection Light Displays the current status of the connection to the collaborative features of the model.

There are three states of the Connection Light:

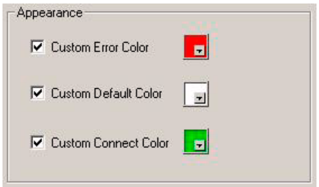
- **Default**: Before a connection attempt has been made.
- **Connected**: The model is currently connected to the collaboration server.
- **Error**: The model could not connect to the collaboration server.

Each state is represented by a separate color which can be customized to suit your needs.

General

Appearance

Use the options in this section to configure the colors that will be displayed for the different states of the Connection Light.



Appearance

☑ Custom Error Color 🟥

☑ Custom Default Color ☐

☑ Custom Connect Color 🟩

- **Custom Error Color**

  Select the Custom Error Color check box to change the color of the light that is shown when there is an error connecting to the Flash Communication server.

- **Error Color**

  Use this option to change the error color when the Custom Error Color option has been selected. You can achieve a variety of different looks by adjusting this color.

- **Custom Default Color**

  Select the Custom Default Color check box to change the color of the light that is shown before a connection attempt to the Flash Communication server has been made.

- **Default Color**

  Use this option to change the default color when the Custom Default Color option has been selected. You can achieve a variety of different looks by adjusting this color.

- **Custom Connect Color**

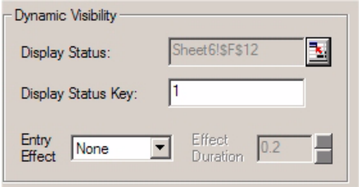
  Select the Custom Connect Color check box to change the color of the light that is shown when the model is connected to the Flash Communication server

- **Connect Color**

  Use this option to change the connect color when the Custom Connect Color option has been selected. You can achieve a variety of different looks by adjusting this color.

Behavior

Dynamic Visibility



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

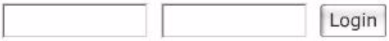
Effect Duration Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Login

The Login component allows users to connect to the collaborative features of the model by logging in with a username and/or password.



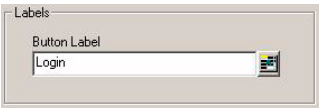
To prevent passwords from being displayed on screen, password fields render user input as asterisks (*).

The username is always passed as the second argument to the server connection script and the password is always passed as the third.

Once a connection has been established, the username will be used to identify the user in other collaboration components, such as the People List. If no username is specified, a default username will assigned in order to differentiate between users. Users can change their usernames after connecting to the server by changing the username field and pressing the login button.

General

Labels Use the options in this section to set the text of the label that appears on the login button. The size of the button is automatically adjusted to fit the label.



Labels

Button Label: Login

- **Button Label text box**

  Use the Button Label text box to manually enter the button label.

- **Button Label selection**

  Use the Button Label selection to select the button label from the spreadsheet.

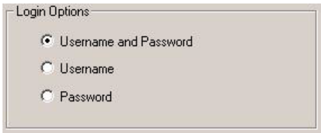
Login Options

Use the options in this section to select what type of login will be used to connect to the Flash Communication Server. A connection can be made with either a username, a password, or both.

To prevent passwords from being displayed on screen, password fields render user input as asterisks (*).

The username is always passed as the second argument to the server connection script and the password is always passed as the third.

Once a connection has been established, the username will be used to identify the user in other collaboration components, such as the People List. If no username is specified, a default username will assigned in order to differentiate between users. Users can change their usernames after connecting to the server by changing the username field and pressing the login button.



Login Options

● Username and Password

○ Username

○ Password

- **Username and Password**

  Use this option to have users connect to the server using both a username and password.

- **Username**

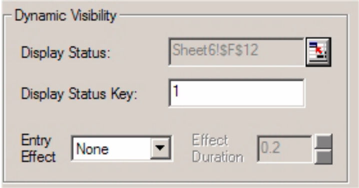
  Use this option to have users connect to the server using just a username.

- **Password**

  Use this option to have users connect to the server using just a password.

Behavior

Dynamic Visibility



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration

Enter the desired value in the text box, or use the up/down arrows to adjust the value.

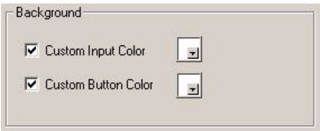
Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Appearance

Background

Use the options in this section to configure the colors of the login component.



Background

☑ Custom Input Color

☑ Custom Button Color

- **Custom Input Color**

  Select the Custom Input Color check box to change the background color of the input labels to the input color.

- **Input Color**

  Use this option to change the color of the labels' backgrounds when the Custom Input Color option has been selected. You can achieve a variety of different looks by adjusting this color.

- **Custom Button Color**

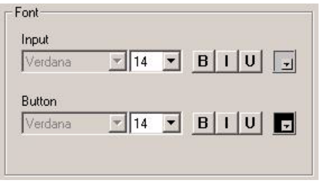
  Select the Custom Button Color check box to change the color of the login button to the button color.

- **Button Color**

  Use this option to change the color of the button when the Custom Button Color option has been selected. You can achieve a variety of different looks by adjusting this color.

Font

Use the options in this section to configure the appearance of the text in the login component.



- **Input font settings**

  Configures the font for the input text fields. See the online help for a description of how to configure the font.

- **Button font settings**

  Configures the font for the button label. See online help for a description of how to configure the font.

People List

The People List displays all of the users that are currently connected to collaborative features of the Xcelsius model.

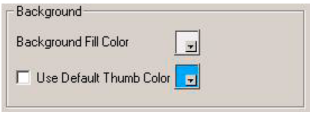
Before the model connects to the collaboration server, it will display `<No Users>`.

When the list of names becomes larger than the size of the People List, a scroll bar is automatically added to allow users to scroll through all of the connected users.

General

Background

Use the options in this section to configure the colors of the elements in the People List.



- **Background Fill Color**

  Use this option to change the color of the list background. You can achieve a variety of different looks by adjusting this color.

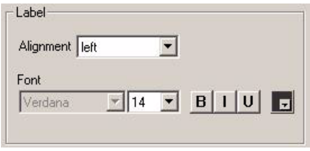
- **Use Default Thumb Color Check box**

  A scroll bar is automatically attached to the people list once there are too many names to fit within the height of the list. Select the Use Default Thumb Color check box to use the default art for the draggable thumb piece in the scroll bar. Uncheck this box to color the thumb piece with the Custom Thumb Color.

- **Custom Thumb Color**

  Use this option to change the color of the scroll bar thumb piece. You can achieve a variety of different looks by adjusting this color.

Label Use the options in this section to configure the appearance of the labels in the People List.



Label

Alignment left

Font

Verdana 14

- **Alignment**

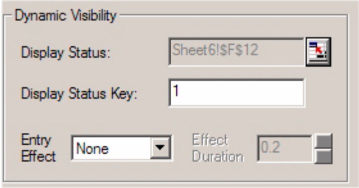
  Select the desired label alignment from the combo box. Choose from left, center, or right.

- **Font Settings**

  Configures the font for the title text. See the online help for a description of how to configure the font.

Behavior

Dynamic Visibility



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration

Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single

Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Remote Scenario Button

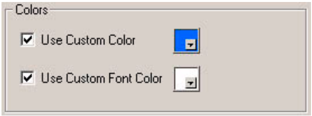
Lets users save states of an Xcelsius model to a remote server. Afterwards, these states or "scenarios" can quickly be loaded, even after closing the model, making the Scenario Buttons well-suited for saving and reviewing results of what-if analyses. Since the scenarios are saved to a remote server, the Remote Scenario Buttons provide a simple and powerful way to share results with authorized users across the globe.

If the model is not connected to a collaboration server, the remote scenarios will be unavailable.

General

Colors

Use the parameters in this section to fine-tune the look of the component.


Colors

☑ Use Custom Color

☑ Use Custom Font Color

- **Use Custom Color**

  Select the Use Custom Color check box to change the color of the component background to the Custom Color.

- **Custom Color**

  Use this option to change the color of the component backgroun when the Use Custom Color option has been selected. You can achieve a variety of different looks by adjusting this color.

  1. Click the **Custom Color** box to display the Color dialog box.

  2. Select a color from the pallette and click **OK**.

- **Use Custom Font Color**

  Select the Use Custom Font Color check box to change the color of the component text to the Custom Font Color.

- **Custom Font Color**

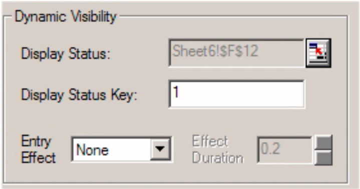
  Use this option to change the color of the component text when the Use Custom Font Color option has been selected. You can achieve a variety of different looks by adjusting this color.

  1. Click the **Custom Font Color** box to display the Color dialog box.

  2. Select a color from the pallette and click **OK**.

Behavior

Dynamic Visibility



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.

- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Maps

Xcelsius provides two types of maps:

- **USA Maps**

  A graphic representation of the USA map can be used as both an output and input component. Each state can represent an output value while at the same time having the same functionality as any other selector.

- **Europe Maps**

  A graphic representation of the European map can be used as both an output and input component. Each country can represent an output value while at the same time having the same functionality as any other selector.

Both maps use the same settings. See “Using the Map Component” on page 123 for more information.

General

Display Data

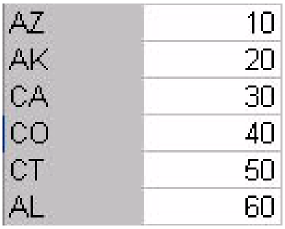
Use the Display Data selection to set the Display Data parameter. The alert functionality is based on the Display data parameter. If the Show Values option has been selected, the value of the parameter is displayed when the pointer passes over the icon.

For ease of use, the Display Data for each region in the map is attained by searching the selected range for the codes defined in the Region Names parameter.

- If the range has 2 columns and more than 2 rows, the map searches for the codes in the first column of the range.
- If the range has 2 rows and more than 2 columns, the map searches for the codes in the first row of the range.

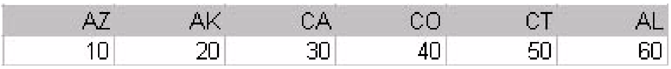
- If the range has 2 columns AND 2 rows, the map determines if there are more codes in the first row or in the first column and uses whichever is greater as the code position.

If the codes are located in the first **column** of the range, the map associates the data to the right of the code with the Display Data of the region that the code represents.



AZ	10
AK	20
CA	30
CO	40
CT	50
AL	60

If the codes are located in the first **row** of the range, the map associates the data below the code with the Display Data of the region that the code represents.



AZ	AK	CA	CO	CT	AL
10	20	30	40	50	60

Either selection shown above would tie the Display Data of the region with the code AZ (by default Arizona) to the value 10, the Display Data of the region with the code AK (by default Arkansas) to the value 20, etc.

Display Data selection

With this option (shown in the margin) you can select the display data values from the spreadsheet.

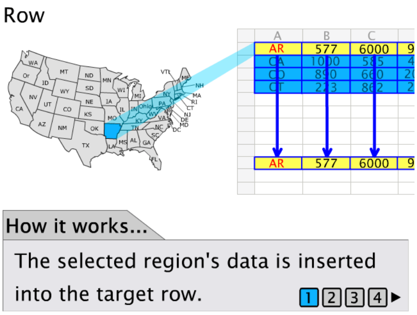
Insert Data

Use the options in this section to define how the USA Map component will behave when a selection is made. There are three parameters:

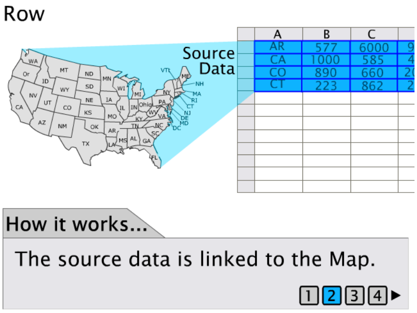
- **Insert Option -** the structure of the data that is inserted when a selection is made.

  Use this option to specify the structure of the data inserted when a selection is made. USA Maps support the following insert options:

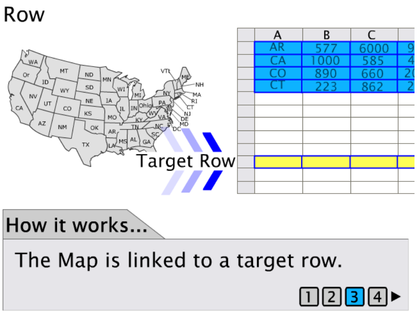
- **rows**



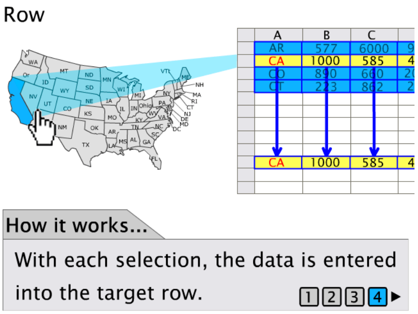
The selected region's data is inserted into the target row.



The source data is linked to the Map.

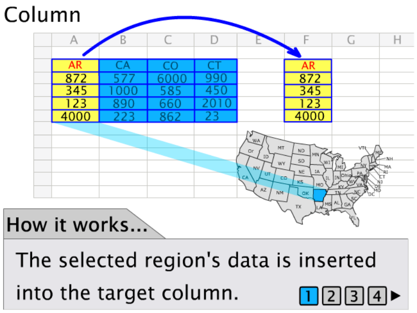


The Map is linked to a target row.

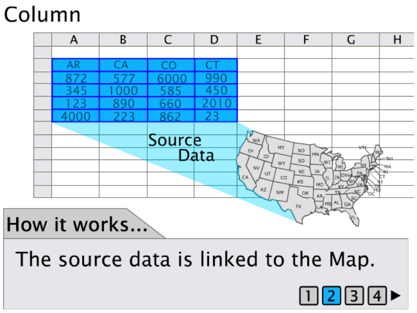


With each selection, the data is entered into the target row.

- **columns**

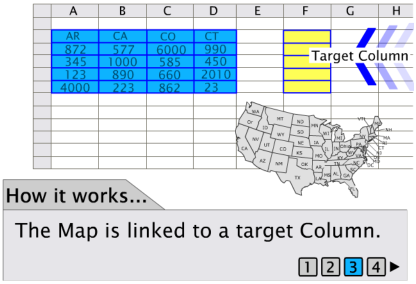


The selected region's data is inserted into the target column.



The source data is linked to the Map.

Column

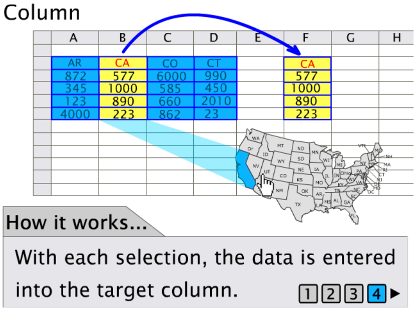


A	B	C	D	E	F
AR	CA	CO	CT		
872	577	6000	990		
345	1000	585	450		
123	890	660	2010		
4000	223	862	23		

How it works...

The Map is linked to a target Column.

Column



A	B	C	D	E	F
AR	CA	CO	CT		CA
872	577	6000	990		577
345	1000	585	450		1000
123	890	660	2010		890
4000	223	862	23		223

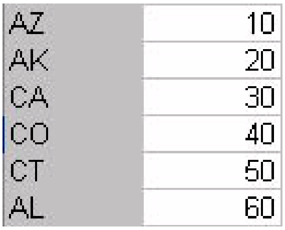
How it works...

With each selection, the data is entered into the target column.

- **Source Data -** the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.

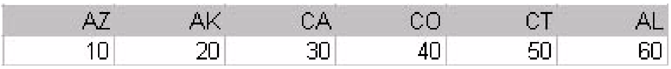
  For ease of use, the Source Data for each region in the map is attained by searching the selected range for the codes defined in the Region Names parameter.

If the Insert Option is set to **rows**, the map associates the data to the right of the code with the Source Data of the region that the code represents.



AZ	10
AK	20
CA	30
CO	40
CT	50
AL	60

If the Insert Option is set to **columns**, the map associates the data below the code with the Source Data of the region that the code represents.



AZ	AK	CA	CO	CT	AL
10	20	30	40	50	60

Either selection shown above would associate the Source Data of the region with the code AZ (by default Arizona) with the value 10, the Source Data of the region with the code AK (by default Arkansas) to the value 20, etc.

- **Insert In -** the cell(s) into which the selected data is inserted.
  - **Source Data selection**
    Use Source Data (shown in margin) to select the source data from the spreadsheet.
  - **Insert In selection**
    Use Insert In (shown in margin) to select the range from the spreadsheet into which the selected values will be inserted.

Titles

Use the options in this section to set the Title and Region Names parameters for the selected component.

Title text box Use this option to manually enter the title for the component.

Title selection Use this option to select the title from the spreadsheet.

Region Names

Region names defines the codes for each region of the map, such as AL for the region Alabama. These codes are then used by Display Data, Source Data, and Target Data to associate values to the appropriate region parameters.

For example, if your spreadsheet listed data for each state under the state's postal abbreviation, you could set the code for each region to its corresponding postal abbreviation.

Region Names selection

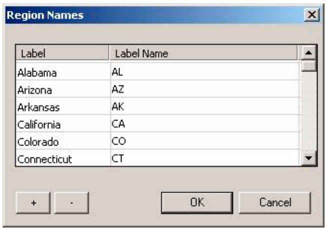
Use this option to select the region names from the spreadsheet.

Region Names manual entry

Use this option to display a popup window for manually entering the region names.

Region Names popup window

Use this option to manually enter the region names for the component.



Label	Label Name
Alabama	AL
Arizona	AZ
Arkansas	AK
California	CA
Colorado	CO
Connecticut	CT

Behavior

Behavior Options

Use the options in this section to specify how the component responds to user interaction in the generated SWF file.

Sound Enabled

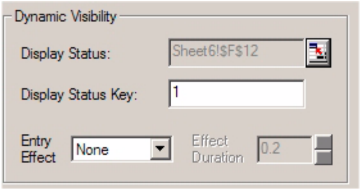
Check the Sound Enabled box to enable sound for the selected component.

Update On

Use Update On to define how the selected component recognizes that a selection has been made. Choose from the following:

- **Mouse Click** - When selected, users must click on an item to select it.
- **Mouse Over** - An item is selected when the pointer passes over it.

Dynamic Visibility



Dynamic Visibility

Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None** - The component will not have an entry effect.
- **Fade-in** - The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.

- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration

Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Map Options

Use this option to select the default state for the component. The USA Map loads with a default state selected in the generated SWF file. This option is enabled only after a valid "Source Data" selection has been made.

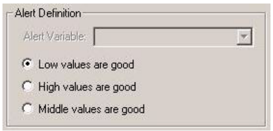
Default State

Select the desired default state from the combo box.

Alerts

Alert Definition

With this group of parameters, you can select one of three ways to calculate the visual indicator status or alert colors/ levels. For multi-dimensional components like Bubble or XY Charts, you can also select the variable/axis used to determine the alert color.



Alert Definition

Alert Variable:

● Low values are good

○ High values are good

○ Middle values are good

Each method is based on a different way to measure the performance of the actual values against the target values. See "How to Use Alerts" on page 164 for more information.

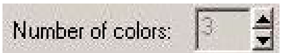
Alert Levels

You can use Alert levels to define the number of alert colors, the percentages or ranges for each color, and the type of color to be used on each level.

The colors are represented on the alert control panel depending on the selected alert method.

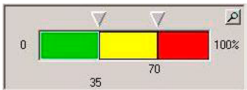
Each alert color has a range that is easily selected by moving the color picker slider on the color alert panel.

Number of colors


Number of colors: 3

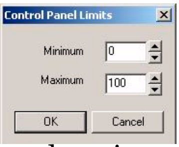
You can specify from two to 10 alert colors using the up/down arrows. New alert colors are added in gray to the left or right of the alert control panel, depending on the selected alert method.

Alert Colors



To adjust the percentages that trigger the alert colors, drag the gray arrows on top of the alert colors selector.

Control Panel Limits


Control Panel Limits

Minimum 0

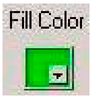
Maximum 100

To adjust the minimum and maximum percentage limits displayed on the alert colors selector, use the up/down arrows or type the required value.

Fill Color

You can change any alert color:

1. On the alert color selector, select the color to be changed by clicking on it.

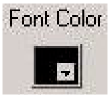


2. Click the button shown in the margin to assign a new alert color to the selected range.

Font Color

You can change the font color for the value alert display only if the Enable Value Alerts checkbox is selected.

1. Select the font color range in the Alert Color selector by clicking on it.



2. Click the button shown in the margin to assign the new font color.

No Data

You can define the alert color that appears when any of the required values to calculate the alert color is missing. For example, if the target or actual value is missing for an alert level, the No Data color can appear instead of the color that was set using the Alert Color selector.

Enable Alerts

Use this option to activate a visual indicator of performance status for the selected component. This visual status uses customized colors. For example, Green might represent acceptable performance, while Red might indicate poor performance. Colors are generated by comparing actual values against target values.

You can customize alert levels, the number of colors, the type of colors, and specific alert features to provide the maximum amount of flexibility for each component.

To enable alerts, check the Enable Alerts check box.

Target

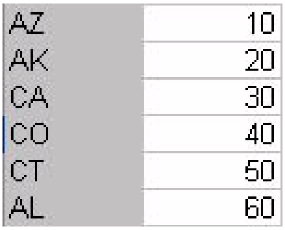
These options let you set the target data used to trigger the alert colors.

For ease of use, the Alert Target for each region in the map is attained by searching the selected range for the codes defined in the Region Names parameter.

- If the range has 2 columns and more than 2 rows, the map searches for the codes in the first column of the range.

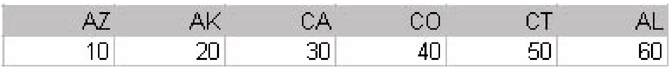
- If the range has 2 rows and more than 2 columns, the map searches for the codes in the first row of the range.
- If the range has 2 columns AND 2 rows, the map determines if there are more codes in the first row or in the first column and uses whichever is greater as the code position.

If the codes are located in the first **column** of the range, the map associates the data to the right of the code with the Alert Target of the region that the code represents.



AZ	10
AK	20
CA	30
CO	40
CT	50
AL	60

If the codes are located in the first **row** of the range, the map associates the data below the code with the Alert Target of the region that the code represents.



AZ	AK	CA	CO	CT	AL
10	20	30	40	50	60

Either selection shown above would tie the Alert Target of the region with the code AZ (by default Arizona) to the value 10, the Display Data of the region with the code AK (by default Arkansas) to the value 20, etc.

Target selection Lets you select the alert target data from the spreadsheet.

Appearance

Title

With the options in this section you can configure the appearance of the title for the selected component.

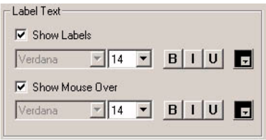
Position Positions the title. Choose from the available options, which may include: top left, top center, top right, left, right, bottom left, bottom center, bottom right.

Show Title Displays the title on the selected component.

X Shift	Shifts the labels to the left or right relative to the position specified in the Position parameter. Enter the desired x shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels to the right, negative values shift the labels to the left. Enter the desired x shift in the text box, or use the up/down arrows to adjust the value.
Y Shift	Shifts the labels up or down relative to the position specified in the Position parameter. Enter the desired y shift in the text box, or use the up/down arrows to adjust the value. Positive values shift the labels up, negative values shift the labels down. Enter the desired y shift in the text box, or use the up/down arrows to adjust the value.
Font Settings	Configures the font for the title text. See the online help for more information.

Label Text

Use the options in this section to configure the appearance of the static labels and the mouse over labels.



Label Text

☑ Show Labels

Verdana 14 B I U

☑ Show Mouse Over

Verdana 14 B I U

Show Labels	Select the Show Labels check box to display the region labels on the map.
Labels Font Settings	Use the first Font section to configure the font for the region labels. See the online help for more information.
Show Mouse Over	Select the Show Mouse Over check box to display the region label when the pointer passes over the region.
Mouse Over Font Settings	Use the second Font section to configure the font for the mouse over. See the online help for more information.

Values

Show Values Select the Show Values check box to display the region value when the pointer passes over the region.

Region

Use the options in this section to configure the appearance of the map regions in different circumstances.

Default Fill Use this option to set the default fill color of the map regions. Regions without Source Data linked to them will be drawn with the default fill color.

1. Click the Default Fill box to display the Color dialog box.
2. Select a color from the palette and click OK.

Note. This option is available only when alerts are disabled.

Transparency Enter the desired transparency of the map in the text box, or use the up/down arrows to select a value from 0 to 100, where 0 is completely transparent and 100 is completely opaque.

Selectable Fill Use this option to set the selectable fill color of the map regions. Regions that have Source Data linked to them will be drawn with this color, unless the Selected Fill color or Mouse Over Fill color applies.

1. Click the Selectable Fill Color box to display the Color dialog box.
2. Select a color from the palette and click OK.

Note. This option is available only when alerts are disabled.

Selected Fill Use this option to set the selected fill color of the map regions. A region will be shown in this color when it is selected.

1. Click the **Selected Fill** box to display the Color dialog box.
2. Select a color from the palette and click **OK**.

Note. This option is available only when alerts are disabled.

Mouse Over Fill Use this option to set the mouse over fill color of the map regions. A selectable region will be shown in this color when the pointer is over it.

1. Click the **Mouse Over Fill** box to display the Color dialog box.
2. Select a color from the palette and click **OK**.

Note. This option is available only when alerts are disabled.

Other

Icon

The Icon is one of the most simple and at the same time most functional components. The Icon can be used as a mobile selector or object.

It can represent the value contained in one cell and be compared to its target or budget value. The Icon changes color depending on its value. See “Alerts” on page 437 for more information.

At the same time, you can use the Icon to activate and display other components. See “Behavior” on page 456 for more information.

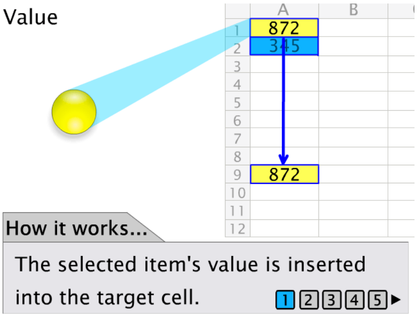
General

Display Data Use the Display Data selection to set the Display Data parameter. The alert functionality is based on the Display data parameter. If the Show Values option has been selected, the value of the parameter is displayed when the pointer passes over the icon.

Insert Data Use the Insert Data parameters to define how the Icon component behaves when a selection is made. There are three options:

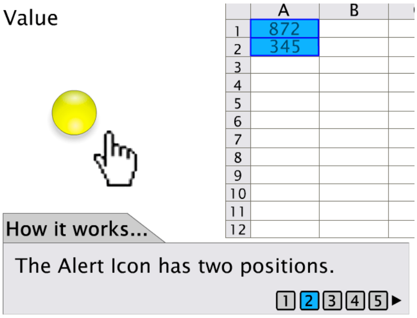
- **Insert Option -** the structure of the data that is inserted when a selection is made.

  This option is disabled for the Icon component because “value” is the only valid option. The images below show how the Insert option works with Icons:



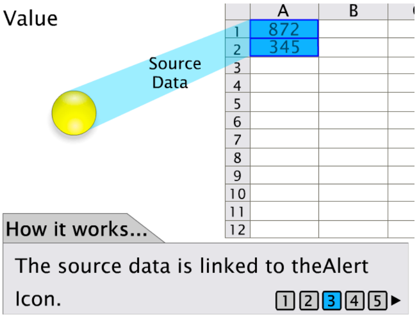
How it works...

The selected item's value is inserted into the target cell.



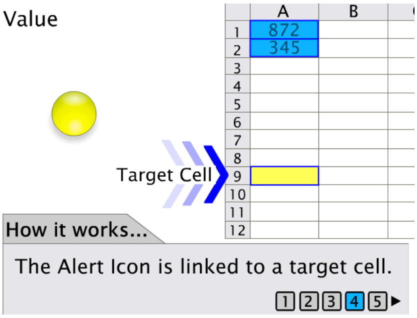
How it works...

The Alert Icon has two positions.



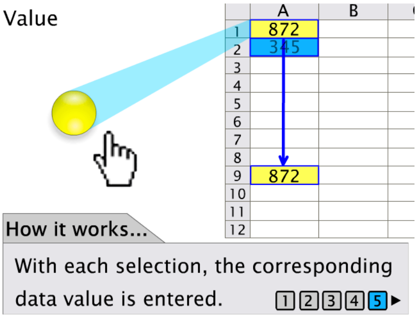
How it works...

The source data is linked to theAlert Icon.



How it works...

The Alert Icon is linked to a target cell.



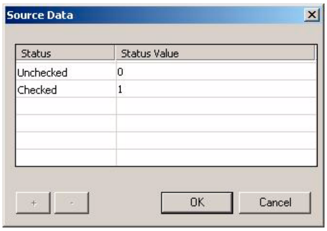
How it works...

With each selection, the corresponding data value is entered.

- **Source Data** - the data that is inserted when a selection is made when the Insert Option is rows, columns, or values.
  - Use Source Data (button shown in the margin) to select the source data from the spreadsheet.
  - Use Source Data manual entry (button shown in the margin) to display a popup window for manually entering the source data.

Note. Manually entered source data is always inserted as text.

- Use the Source Data popup window for manual entry of the source data.



Status	Status Value
Unchecked	0
Checked	1

- **Insert In -** the cell(s) into which the selected data is inserted.

  Use Insert In (button shown in the margin) to select the range from the spreadsheet into which the selected values will be inserted.

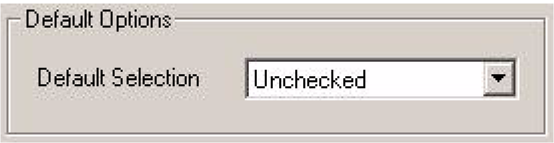
Label Use the Label options to set the Label parameter for the component. If the Show Labels option is selected, the value of the parameter appears, when the pointer moves over the component.

Use Label text box to manually enter the label for the component.

Use Label selection (shown in the margin) to select the label from the spreadsheet.

Behavior

Default Options

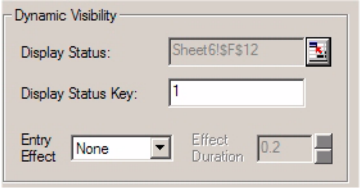


Default Selection: Unchecked

- **Default Selection**

Choose from either "Checked" or "Unchecked" to specify the state that the Check Box should be in the model is loaded. This option also determines which default data is inserted into the Insert In range when the model is loaded.

Display Status



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

- **Display Status**
  Use this option to select the cell from the spreadsheet used to control the visibility of the component.
- **Display Status Key**
  Use this option to enter the value that the Display Status must match for the component to be visible.
- **Entry Effect**
  Use this option to set the entry effect for the component. Choose from the following:
    - **None -** The component will not have an entry effect.
    - **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
    - **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
    - **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.
- **Effect Duration**
  Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example,

Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

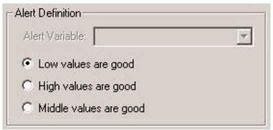
Behavior Options

Use the options in this section to specify how the component responds to user interaction in the generated SWF file.

- Check the **Sound Enabled** box to enable sound for the selected component.
- Use **Update On** to define how the selected component recognizes that a selection has been made. Choose from the following:
  - **Mouse Click -** When selected, users must click on an item to select it.
  - **Mouse Over -** An item is selected when the pointer passes over it.

Alerts

With this group of parameters, you can select one of three ways to calculate the visual indicator status or alert colors/ levels.



Alert Definition

Alert Variable:

● Low values are good

○ High values are good

○ Middle values are good

Each method is based on a different way to measure the performance of the actual values against the target values. See “How to Use Alerts” on page 164 for more information.

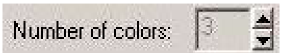
Alert Levels

You can use Alert levels to define the number of alert colors, the percentages or ranges for each color, and the type of color to be used on each level.

The colors are represented on the alert control panel depending on the selected alert method.

Each alert color has a range that is easily selected by moving the color picker slider on the color alert panel.

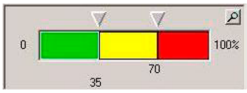
- **Number of colors**



Number of colors: 3

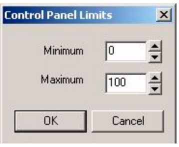
You can specify from two to 10 alert colors using the up/down arrows. New alert colors are added in gray to the left or right of the alert control panel, depending on the selected alert method.

- **Alert Colors**



To adjust the percentages that trigger the alert colors, drag the gray arrows on top of the alert colors selector.

- **Control Panel Limits**



Minimum 0

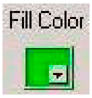
Maximum 100

To adjust the minimum and maximum percentage limits displayed on the alert colors selector, use the up/down arrows or type the required value.

- **Fill Color**

You can change any alert color:

1. On the alert color selector, select the color to be changed by clicking on it.



2. Click the button shown in the margin to assign a new alert color to the selected range.

- **No Data**

You can define the alert color that appears when any of the required values to calculate the alert color is missing. For example, if the target or actual value is missing for an alert level, the No Data color can appear instead of the color that was set using the Alert Color selector.

Enable Alerts

Use this option to activate a visual indicator of performance status for the selected component. This visual status uses customized colors. For example, Green might represent acceptable performance, while Red might indicate poor performance. Colors are generated by comparing actual values against target values.

You can customize alert levels, the number of colors, the type of colors, and specific alert features to provide the maximum amount of flexibility for each component.

☑ Enable Alerts

To enable alerts, check the Enable Alerts check box.

Target

With the Target text box you can set the target data used to trigger the alert colors. With the Target selection option, you can select a cell so that actual data can be compared to the selected target.

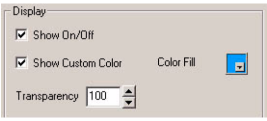
The target text box is available in the grid and all single value components that have the Alert tab enabled (dial, gauge, value, progress bars, and sliders). This option lets you manually enter the alert target value for the component.

The target selection button (shown in the margin) lets you select the alert target data from the spreadsheet.

Appearance

Display

Use the options in this section to fine-tune the look of the icon.



Display

☑ Show On/Off

☑ Show Custom Color

Color Fill

Transparency 100

- **Show On/Off**

  Select the Show On/Off check box to make the icon appear differently when it is On than when it is Off.

- **Show Custom Color**

  Select the Show Custom Color check box to change the color of the icon to the Color Fill color.

Note. This option is available only when alerts are disabled.

- **Color Fill**

  Use this option to change the color of the component object when Show Custom Color has been selected. You can achieve a variety of different looks by adjusting this color.

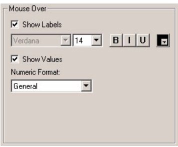
  1. Click the Color Fill box to display the Color dialog box.
  2. Select a color from the palette.
  3. Click OK.

- **Transparency**

  Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 to 100, where 0 is completely transparent and 100 is completely opaque.

Mouse Over

Use the options in this section to determine the information displayed when the mouse pointer passes over the icon. When the pointer moves across the icon, you can display any combination of its label or value, and hide the information otherwise.



Mouse Over

☑ Show Labels

Verdana 14

☑ Show Values

Numeric Format: General

- **Show Labels**

  Select the Show Labels check box to display the icon label when the pointer passes over the icon.

- **Mouse Over Font Settings**

  Use Font to configure the font that is displayed during the mouse over. See the online help for more information about font settings.

- **Show Values**

  Select the Show Values check box to display the icon value when the pointer passes over the icon.

- **Numeric Format**

  With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

  If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

  See the online help for more information about numeric settings.

Input Text

A simple, yet powerful input component which allows users to input values into the model by typing.

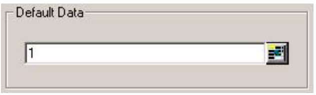
Once the Input Text has focus, users can insert the data in the field by pressing the Enter key or unfocusing the component.

If the text entered into the component is numeric, it is inserted into the calculation model as a number. Otherwise, it is inserted as a string. For example, entering "$50" will insert the string "$50", not the number 50.

General

Default Data

This section lets you define the default text for the input label. At startup of the generated model, the default text is displayed in the label and inserted into the Insert In cell.



Default Data

1

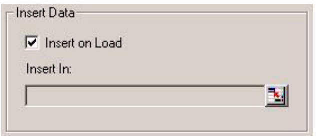
- **Default Data text box**

  Use this option to have manually enter the default text.

- **Default Data selection**

  Use the Default Data selection to select the default text from the spreadsheet.

Insert Data



Insert Data

☑ Insert on Load

Insert In:

- **Insert on Load**

  Select the Insert on Load check box to insert the Default Text into the Insert In cell once the generated application is loaded.

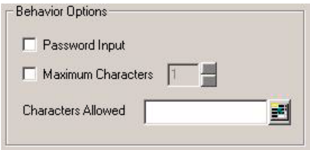
- **Insert In selection**

  Use **Insert In** to select the cell from the spreadsheet into which the text will be inserted.

Behavior

Behavior Options

Use the options in this section to configure how user input should be displayed as well as what type of input is allowed.



Behavior Options

☐ Password Input

☐ Maximum Characters 1

Characters Allowed

- **Password Input**

  Select the Password Input check box to display typed characters as asterisks (*). This feature can be used to prevent passwords or other sensitive information from being displayed on screen.

- **Maximum Characters check box**

  Select the Maximum Characters check box to limit the user input to the number of characters specified in the Maximum Characters value.

- **Maximum Characters value**

  When the Maximum Characters check box is enabled, this value sets the maximum number of characters that a user can enter into the label. Enter the desired value in the text box, or use the up/down arrows to adjust the maximum number of characters.

- **Characters Allowed**

  Use this field to prevent users from entering certain characters into the label. All characters will be allowed if the field is left blank.

  Expressions within this field define which characters are allowed. The simplest expression is a single character, such as "a", which will allow users to enter the letter "a" into the label.

  Multiple expressions may be concatenated to create larger groups of allowed or not allowed characters. For example, the expresion "abc" will allow the letters "a", "b", and "c" to be entered into the label by users.

  The dash (-) can also be used to define a range of characters. The expression "a-z", for example, defines all lowercase letters.

  When there are only a few characters that you do **not** want to be allowed, it is often easier to specify those few instead of all of the other characters. This can be done by prefixing the entire field with the caret (^). Every character besides those specified will be allowed. To prevent users from entering numbers, for example, the field could be set to "^0-9".

The caret can also be used throughout the string to switch between allowing and excluding characters. The **first** time it appears in the field, the characters defined by the expressions that follow it **will not** be allowed until another caret appears. Once this **second** caret appears, the characters defined by the expressions that follow it **will** be allowed until another caret appears. For example, setting Characters Allowed to "^0-9^abc^def" will not allow numbers, allow "a", "b", and "c" (allowed anyway since the field begins with a caret), and not allow "d", "e", and "f".

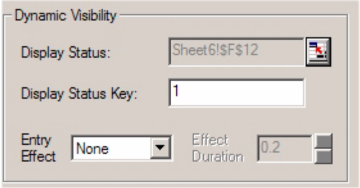
Since the dash and caret have special meanings, there needs to be a way to specify the actual dash and caret as part of the character set. This is accomplished by placing a backslash (\) before the special character. An actual dash would be specified with "\-" and an actual caret would be specified with "\^".

Because the backslash also has a special meaning, a literal backslash must also be represented by placing a backslash before it.

A few common characters sets are shown below:

- Whole Numbers (123): "\-0-9"
- Real Numbers (1.5): "\-0-9."
- Fractions (1/2): "\-/0-9"
- Positive Whole Numbers: "0-9"
- Positive Decimal Numbers: "0-9."
- Letters: "a-zA-Z"
- Numbers and Letters: "0-9a-zA-Z"

Dynamic Visibility



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

- **Display Status**
  Use this option to select the cell from the spreadsheet used to control the visibility of the component.
- **Display Status Key**
  Use this option to enter the value that the Display Status must match for the component to be visible.
- **Entry Effect**
  Use this option to set the entry effect for the component. Choose from the following:
  - **None -** The component will not have an entry effect.
  - **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
  - **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
  - **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.
- **Effect Duration**
  Enter the desired value in the text box, or use the up/down arrows to adjust the value.

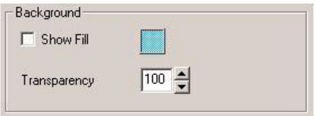
Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example,

Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Appearance

Background Use the options in this section to configure the appearance of the label background.



☐ Show Fill

Transparency 100

- **Show Fill Color**

  Select the Show Default check box to change the color of the label background to the fill color.

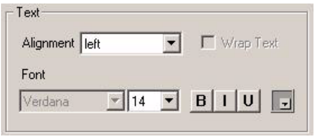
- **Fill Color**

  Use this option to change the color of the label background when the Show Fill Color option has been selected. You can achieve a variety of different looks by adjusting this color.

- **Transparency**

  Use this option to control the transparency of the list items. Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 (completely transparent) to 100 (completely opaque).

Text Use the options in this section to configure the appearance of the text in the label.



Alignment left

☐ Wrap Text

Font Verdana 14

- **Alignment**

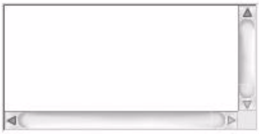
  Select the desired label alignment from the combo box. Choose from left, center, or right.

- **Font Settings**

Configures the font for the title text. See the online help for a description of how to configure the font.

Input Text Area

Similar to the Input Text component (see “Input Text” on page 441), the Input Text Area allows users to input text into the model. The Input Text Area, however, allows users to type multiple lines of text, making it useful for comments or entries where the size of the input is unknown.



Once the Input Text Area has focus, users can insert the data in the field by unfocusing the component.

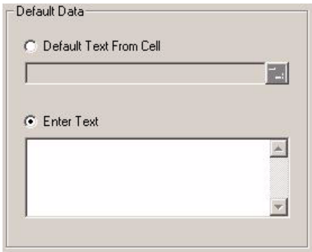
Vertical and horizontal scroll bars can be enabled individually on the Input Text Area, allowing users to scroll through large amounts of text quickly. The scroll bars can also be set to Auto Hide so that they appear only when necessary.

The Input Text Area always inserts the data in the area as a string.

General

Default Data

This section lets you define the default text for the input label. At startup of the generated model, the default text is displayed in the label and inserted into the Insert In cell.



Default Data

○ Default Text From Cell

● Enter Text

- **Default Text From Cell**

  Use this option to have the default text come from a cell in the spreadsheet.

- **Default Text selection**

  Use this option to select the cell from the spreadsheet that contains the default text.

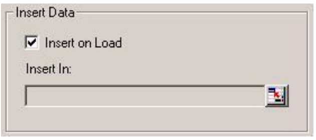
- **Enter Text**

  Select this option to manually enter the default text that will be shown in the label.

- **Default Text Field**

  Use the Default Text field to manually enter the default text when the Enter Text option has been selected.

Insert Data



Insert Data

☑ Insert on Load

Insert In:

- **Insert on Load**

  Select the Insert on Load check box to insert the Default Text into the Insert In cell once the generated application is loaded.

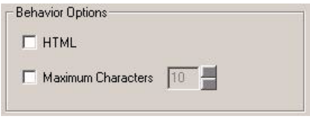
- **Insert In selection**

  Use **Insert In** to select the cell from the spreadsheet into which the text will be inserted.

Behavior

Behavior Options

Use the options in this section to enable or disable HTML rendering of Default Text, and to define the maximum length of the user input allowed.



- **HTML**

  Select the HTML check box to render the default text as HTML. The component will parse the default text as if it were HTML code and attempt to render it as an internet browser would.

  The following HTML tags are supported: a href, b, font color, font face, font size, i, p, u

  See the **HTML** reference section in the online help for a description of HTML and the supported tags.

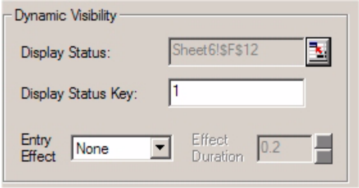
- **Maximum Characters check box**

  Select the Maximum Characters check box to limit the user input to the number of characters specified in the Maximum Characters value.

- **Maximum Characters value**

  When the Maximum Characters check box is enabled, this value sets the maximum number of characters that a user can enter into the label. Enter the desired value in the text box, or use the up/down arrows to adjust the maximum number of characters.

Dynamic Visibility



Dynamic Visibility

Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

- **Display Status**
  Use this option to select the cell from the spreadsheet used to control the visibility of the component.
- **Display Status Key**
  Use this option to enter the value that the Display Status must match for the component to be visible.
- **Entry Effect**
  Use this option to set the entry effect for the component. Choose from the following:
  - **None -** The component will not have an entry effect.
  - **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
  - **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
  - **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.
- **Effect Duration**
  Enter the desired value in the text box, or use the up/down arrows to adjust the value.

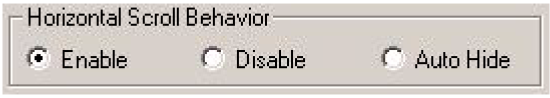
Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example,

Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Horizontal Scroll Behavior

This section lets you define the behavior of the horizontal scroll bar. A horizontal scroll bar can be used to quickly navigate horizontally through text and is useful for displaying long lines of text within a narrow text area.



Horizontal Scroll Behavior

● Enable ○ Disable ○ Auto Hide

- **Enable**

Select this option to attach a horizontal scroll bar to the text area. This scroll bar will always be shown.

- **Disable**

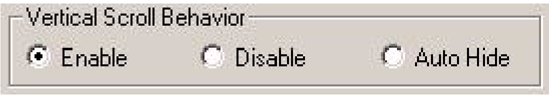
Select this option when a horizontal scroll bar is unnecessary or not preferred.

- **Auto Hide**

Select this option to attach a horizontal scroll bar to the text area. This scroll bar will automatically hide itself when the length of each line fits within the width of the text area.

Vertical Scroll Behavior

This section lets you define the behavior of the vertical scroll bar. A vertical scroll bar can be used to quickly navigate vertically through text and is useful for displaying several lines of text within a short text area.



Vertical Scroll Behavior

● Enable ○ Disable ○ Auto Hide

- **Enable**

Select this option to attach a vertical scroll bar to the text area. This scroll bar will always be shown.

- **Disable**

Select this option when a vertical scroll bar is unnecessary or not preferred.

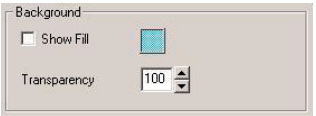
- **Auto Hide**

Select this option to attach a vertical scroll bar to the text area. This scroll bar will automatically hide itself when the height of all the lines of text fit within the height of the text area.

Appearance

Background

Use the options in this section to configure the appearance of the label background.



Background

☐ Show Fill

Transparency 100

- **Show Fill Color**

  Select the Show Default check box to change the color of the label background to the fill color.

- **Fill Color**

  Use this option to change the color of the label background when the Show Fill Color option has been selected. You can achieve a variety of different looks by adjusting this color.

- **Transparency**

  Use this option to control the transparency of the list items. Enter the desired transparency in the text box, or use the up/down arrows to select a value from 0 (completely transparent) to 100 (completely opaque).

Scroll Options

Use the options in this section to configure the color of the scroll bar.

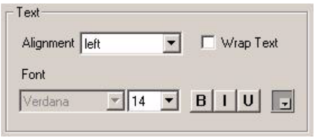
- **Use Custom Scroll Color**

  Select the Use Custom Scroll Color check box to change the color of the draggable thumb piece in the scroll bar to the Custom Scroll Color.

- **Custom Scroll Color**

  Use this option to change the color of the thumb piece in the scroll bar when the Use Custom Scroll Color option has been selected. You can achieve a variety of different looks by adjusting this color.

Text Use the options in this section to configure the appearance of the text in the label.



Text

Alignment: left

☐ Wrap Text

Font: Verdana 14

- **Alignment**

  Select the desired label alignment from the combo box. Choose from left, center, or right.

- **Wrap Text**

  Select the Wrap Text check box to cause lines of text that are longer than the label width to wrap to the next line of the label.

- **Font Settings**

  Configures the font for the title text. See the online help for a description of how to configure the font.

Label Settings

The Label component lets you add an unlimited amount of text to enhance your models. You can use the Label component to create titles, subtitles, explanations, help, and so on.

When the Data parameter of the Label is linked to a cell, the Label inherits the visual look of that cell. This includes the cell color, size, and borders.

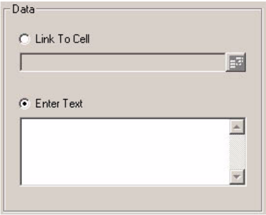
When a spreadsheet is re-imported and the Refresh Spreadsheet Format option is checked, Label components linked to cells will re-inherit the look of those cells.

Vertical and horizontal scroll bars can be enabled individually on the Label, allowing users to scroll through large amounts of text quickly. The scroll bars can also be set to Auto Hide so that they appear only when necessary.

General

Data

This section lets you link the label to text.



Data

○ Link To Cell

● Enter Text

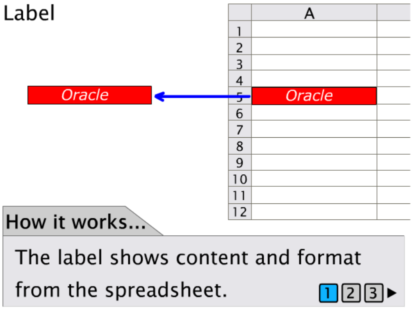
- **Link To Cell**

  Use this option to link the label to a cell in the spreadsheet. Any change to the value of this cell will be reflected in the label.

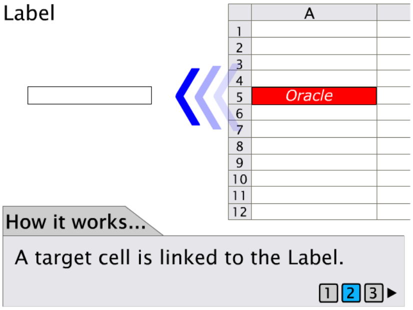
- **Link to Cell selection**

  Use this option (shown in the margin) to select the cell from the spreadsheet.

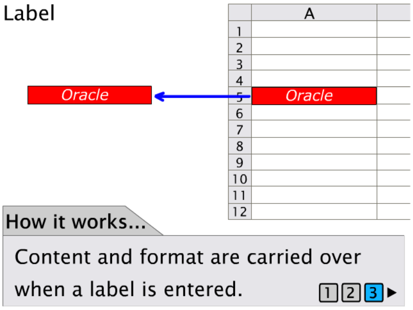
How It Works



The label shows content and format from the spreadsheet.



A target cell is linked to the Label.



Content and format are carried over when a label is entered.

- **Enter Text**

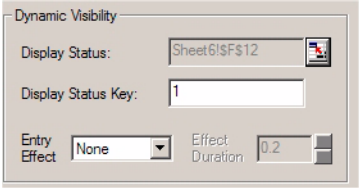
  Select this option to create a static label with text that is manually entered.

- **Label Text Field**

  You can enter Label text through this text field when the Enter Text option has been selected.

Behavior

Dynamic Visibility



Dynamic Visibility

Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

- **Display Status**

  Use this option to select the cell from the spreadsheet used to control the visibility of the component.

- **Display Status Key**

Use this option to enter the value that the Display Status must match for the component to be visible.

- **Entry Effect**

  Use this option to set the entry effect for the component. Choose from the following:

  - **None -** The component will not have an entry effect.
  - **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
  - **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
  - **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible

beginning from the top corner, until it reaches its full height.

- **Effect Duration**

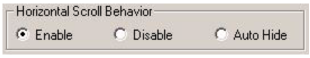
  Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Horizontal Scroll Behavior

This section lets you define the behavior of the horizontal scroll bar. A horizontal scroll bar can be used to quickly navigate horizontally through text and is useful for displaying long lines of text within a narrow text area.



Horizontal Scroll Behavior

● Enable ○ Disable ○ Auto Hide

- **Enable**

  Select this option to attach a horizontal scroll bar to the text area. This scroll bar will always be shown.

- **Disable**

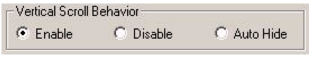
  Select this option when a horizontal scroll bar is unnecessary or not preferred.

- **Auto Hide**

  Select this option to attach a horizontal scroll bar to the text area. This scroll bar will automatically hide itself when the length of each line fits within the width of the text area.

Vertical Scroll Behavior

This section lets you define the behavior of the vertical scroll bar. A vertical scroll bar can be used to quickly navigate vertically through text and is useful for displaying several lines of text within a short text area.



Vertical Scroll Behavior

● Enable ○ Disable ○ Auto Hide

- **Enable**

  Select this option to attach a vertical scroll bar to the text area. This scroll bar will always be shown.

- **Disable**

  Select this option when a vertical scroll bar is unnecessary or not preferred.

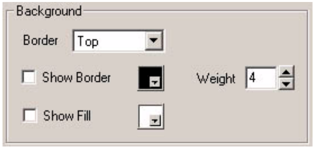
- **Auto Hide**

  Select this option to attach a vertical scroll bar to the text area. This scroll bar will automatically hide itself when the height of all the lines of text fit within the height of the text area.

Appearance

Background

Use the options in this section to configure the appearance of the label background and borders.



Background

Border: Top

☐ Show Border Weight 4

☐ Show Fill

- **Border combo box**

  Use this option to specify which sides of the border are currently being adjusted by the Show Border, Border Color, and Weight options. The four sides of the label border - Top, Bottom, Left, and Right - can be adjusted independently by selecting the appropriate side. All four sides can be adjusted simultaneously by selecting All Sides.

- **Show Border**

  Select **Show Border** to display a border on the label, at the side specified by the Border combo box.

- **Border Color**

  Use this option to set the color of the border at the side specified by the Border combo box.

  1. Click the **Border Color** box to display the Color dialog.

  2. Select a color from the pallette and click **OK**.

- **Weight**

  Enter the desired value in the text box, or use the up/down arrows to adjust the thickness of the border at the side specified by the Border combo box.

- **Show Fill**

  Select the Show Fill check box to display a colored background behind the label. The color is determined by the Fill Color.

- **Fill Color**

  Use this option to set the fill color for the label. Click on the Fill Color box to display the Color dialog. Select a color from the pallet and click OK to set the fill color.

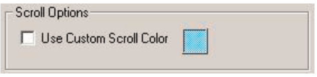
Number With the Numeric Format parameter you can apply predefined formats to values that are displayed. The available formats are a subset of the format options available in Excel.

If the application is unable to determine the structure of a format string that was imported from Excel, the Numeric Format parameter is set to “From Spreadsheet”.

See the online help for more information about numeric settings.

Scroll Options

Use the options in this section to configure the color of the scroll bar.



Scroll Options

☐ Use Custom Scroll Color

- **Use Custom Scroll Color**

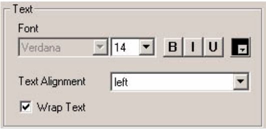
  Select the Use Custom Scroll Color check box to change the color of the draggable thumb piece in the scroll bar to the Custom Scroll Color.

- **Custom Scroll Color**

  Use this option to change the color of the thumb piece in the scroll bar when the Use Custom Scroll Color option has been selected. You can achieve a variety of different looks by adjusting this color.

Text

Use the options in this section to configure the appearance of the text in the label.



Text

Font: Verdana 14

Text Alignment: left

☑ Wrap Text

- **Font Size combo box**

  Select the desired font size for the limits from the combo box. Font sizes range from 8 to 72.

- **Bold**

  Select this option to display the label in bold text.

- **Italic**

  Select this option to display the label in italic text.

- **Underline**

  Select this option to display the label in underlined text.

- **Font Color**

  Use this option to set the font color for the label.

   1. Click the Font Color box to display the Color dialog.
   2. Select a color from the palette and click OK.

- **Text Alignment**

  Select the desired label alignment from the combo box. Choose from left, center, or right.

- **Wrap Text**

  Select the Wrap Text check box to cause lines of text that are longer than the label width to wrap to the next line of the label.

Line

A simple vertical or horizontal line that you add into your models.

Both the color and thickness of the line can be adjusted using the Appearance parameters on the General tab.

General

Use the Line Appearance options to configure the appearance of the Line component.

Line Color

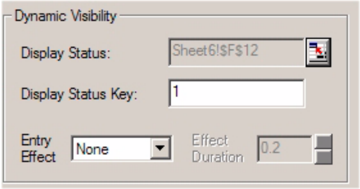
Use this option to set the line color.

1. Click the Line Color box to display the Color dialog box.
2. Select a color from the palette and click OK.

Line Weight

Enter the desired line weight in the text box, or use the up/ down arrows to adjust the value.

Behavior



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration

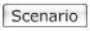
Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Local Scenario

Lets users save states of an Xcelsius model to their local machines. Afterwards, these states or "scenarios" can quickly be loaded, even after closing the model, making the Scenario Buttons well-suited for saving and reviewing results of what-if analyses.



Since these scenarios are saved to the local machine, the scenarios will not be available if the model is opened on a different machine. The **Remote Scenario Buttons** available in the **Professional Edition only** can be used to make scenarios available to multiple users on different machines.

See “Introduction to the Local Scenario Component” on page 145 for more information.

General

Use the parameters in this section to fine-tune the look of the component.

Use Custom Color

Select the Use Custom Color check box to change the color of the component background to the Custom Color.

Custom Color

Use this option to change the color of the component background when the Use Custom Color option has been selected. You can achieve a variety of different looks by adjusting this color.

1. Click the Custom Color box to display the Color dialog box.
2. Select a color from the palette and click OK.

Use Custom Font Color

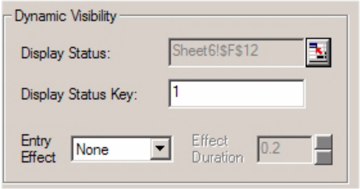
Select the Use Custom Font Color check box to change the color of the component text to the Custom Font Color.

Custom Font Color

Use this option to change the color of the component text when the Use Custom Font Color option has been selected. You can achieve a variety of different looks by adjusting this color.

1. Click the Custom Font Color box to display the Color dialog box.
2. Select a color from the palette and click OK.

Behavior



Display Status: Sheet6!$F$12
Display Status Key: 1
Entry Effect: None
Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.

- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Trend Icon

The trend Icon changes its pointing direction, depending on the value of the cell to which it is linked (see the next page for more information).

General

Use the Data section to set the Data parameter for the Trend Icon. The value of the Data parameter determines which icon is displayed for the component.

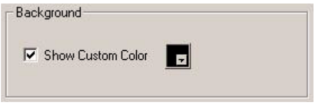
- ⬆ If the value of Data is greater than 0, the component displays the icon shown in the margin.
- ⬇ If the value of Data is less than 0, the component displays the icon shown in the margin.
- ▬ If the value of Data is equal to 0, the component displays the icon shown in the margin.

Use the Data text box to manually enter the data value for the component.

Use the icon shown in the margin to select the data value from the spreadsheet.

Background

Use the options in this section to set the color of the trend icon.



Background

☑ Show Custom Color

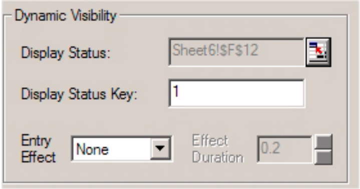
Show Custom Color

Select the Show Custom Color check box to change the color of the trend icon to the custom color.

Custom Color

Use this option to change the color of the trend icon when the Show Custom Color option has been selected. You can achieve a variety of different looks by adjusting this color.

Behavior



Dynamic Visibility

Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status

Use this option to select the cell from the spreadsheet used to control the visibility of the component.

Display Status Key

Use this option to enter the value that the Display Status must match for the component to be visible.

Entry Effect

Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.

- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

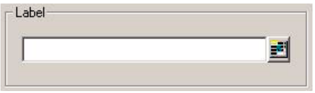
URL Link Button

A simple button that links to a relative or absolute URL when pressed.

You can create a text-only link by unchecking the Show Background check box and entering in a label. You can also uncheck the Show Background check box and place the transparent URL button over an imported image to create a custom URL link button.

General

Label Use the options in this section to set the label that will appear on the button.



- **Label text box**

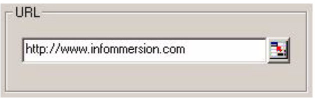
  Use this option to manually enter the label for the component.

- **Label selection**

  Use this option to select the label from the spreadsheet.

URL Options

Use this section to enter the Uniform Resource Locator (URL) link for the button. A URL is also referred to as a Web address. Note that http:// is required for hyperlinks.



URL

http://www.infommersion.com

- **URL text box**

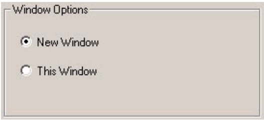
Use this option to manually enter the URL for the component.

- **URL selection**

Use this option to select the URL from the spreadsheet. In the generated model, the URL associated with the button will update as the selected cell value changes. With this functionality, you can create one button that will link to many different pages depending on the state of the model.

Window Options

Use the options in this section to choose where the link should be opened when the URL Link button is clicked.



Window Options

● New Window

○ This Window

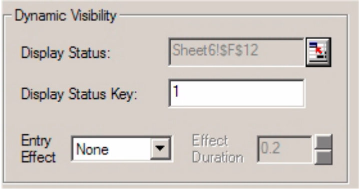
- **New Window**

  Select this option to open the link in a new browser window.

- **This Window**

  Select this option to open the link in the same browser window. The current contents of the window will be replaced.

Behavior



Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

Display Status	Use this option to select the cell from the spreadsheet used to control the visibility of the component.
Display Status Key	Use this option to enter the value that the Display Status must match for the component to be visible.
Entry Effect	Use this option to set the entry effect for the component. Choose from the following:

- **None -** The component will not have an entry effect.
- **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
- **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
- **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

Effect Duration	Enter the desired value in the text box, or use the up/down arrows to adjust the value.

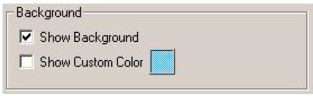
Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Appearance

Background

Use the options in this section to configure the appearance of the button.



Background

☑ Show Background

☐ Show Custom Color

- **Show Background**

  Select the Show Background check box to show a background with the URL link button. By unchecking this, you can create a text-only link. You can also uncheck this and place the transparent URL button over an imported image to create a custom URL link button.

- **Use Custom Fill Check box**

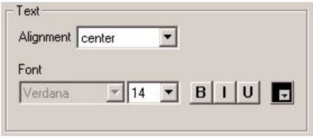
  Select the Use Custom Fill check box to change the background color of the button to the Fill Color.

- **Fill Color**

  Use this option to change the background color of the button. You can achieve a variety of different looks by adjusting this color.

Text

Use the options in this section to configure the appearance of the button label.



Text

Alignment: center

Font: Verdana 14

- **Alignment**

  Positions the label within the button. Choose from left, center, or right.

- **Font Settings**

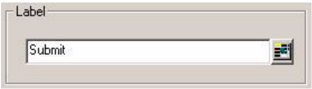
  Configures the font for the title text. See the online help for more information about font settings.

XML Data Button

Available in the Professional Edition only, the XML Data buttons allow users to refresh model data from an external source. Live model data can also be translated and sent to an external source using the XML Data Buttons. See “Using the XML Data Component” on page 192 for more information.

General

Label Use the options in this section to set the label that will appear on the button.



Label

Submit

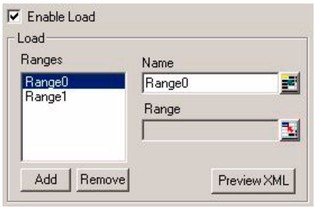
- **Label text box**

  Use this option to manually enter the label for the component.

- **Label selection**

  Use this option to select the label from the spreadsheet.

Load Use the options in this section to edit the ranges that the return XML will load into.



☑ Enable Load

Load

Ranges: Range0, Range1

Name: Range0

Range:

The **Name** and **Range** parameters apply to the range that is selected (indicated by a blue highlight) in the Ranges list box.

- **Enable Load**

  Select this check box to load the XML data at the URL into the Load Ranges when the button is triggered.

- **Ranges list box**

  Select a range in the list box to edit the data for that range.

- **Add**

  Use the **Add** button to add a new range to be sent.

- **Remove**

  Use the **Remove** button to remove a range from the list and keep it from being sent to the URL. The range that is selected (indicated by a blue highlight) in the Ranges list box will be removed.

- **Name text box**

  Use this option to manually enter the name for the selected range.

- **Name selection**

  Use this option to select the name for the selected range from the spreadsheet.

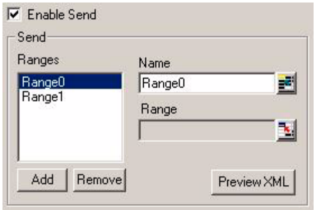
- **Range**

  Use this option to select the cells for the selected range from the spreadsheet.

- **Preview XML**

  Use the **Preview XML** button to see the structure of the XML that your model needs to receive from the external data source.

Send Use the options in this section to edit the ranges that are translated to XML and sent to the URL. The translated ranges are sent via HTTP using the POST method.



☑ Enable Send

Ranges: Range0, Range1

Name: Range0

The **Name** and **Range** parameters apply to the range that is selected (indicated by a blue highlight) in the Ranges list box.

- **Enable Send**

  Select this check box to send the Send Ranges in XML format to the URL when the button is triggered.

- **Ranges list box**

  Select a range in the list box to edit the data for that range.

- **Add**

  Use the **Add** button to add a new range to be sent.

- **Remove**

  Use the **Remove** button to remove a range from the list and keep it from being sent to the URL. The range that is selected (indicated by a blue highlight) in the Ranges list box will be removed.

- **Name text box**

  Use this option to manually enter the name for the selected range.

- **Name selection**

  Use this option to select the name for the selected range from the spreadsheet.

- **Range**

  Use this option to select the cells for the selected range from the spreadsheet.

- **Preview XML**

  Use the **Preview XML** button to see the structure of the XML that your model will send to the URL.

URL

Use the options in this section to specify the external source that the XML Data component will connect with.

- **URL text box**

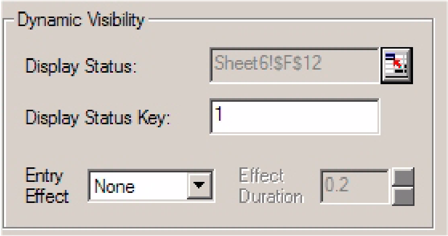
  Use this option to enter the Uniform Resource Locator (URL) link for the button. A URL is also referred to as a Web address. Note that http:// is required for hyperlinks.

- **URL selection**

  Use this option to select the URL from the spreadsheet. Any change to the value of this cell will update the URL button to link to the new value.

Behavior

Dynamic Visibility



Dynamic Visibility

Display Status: Sheet6!$F$12

Display Status Key: 1

Entry Effect: None

Effect Duration: 0.2

Use this set of options to control the visibility of a component and the animation effect used when the component is displayed. By combining these two features, you can create dazzling models that add impact to your presentations.

- **Display Status**

  Use this option to select the cell from the spreadsheet used to control the visibility of the component.

- **Display Status Key**

  Use this option to enter the value that the Display Status must match for the component to be visible.

- **Entry Effect**

  Use this option to set the entry effect for the component. Choose from the following:

  - **None -** The component will not have an entry effect.
  - **Fade-in -** The component will become visible, beginning with a low transparency level, until it reaches its full visibility status.
  - **Grow -** The component will become visible beginning from the top corner until it reaches its full height and width.
  - **Grow X first -** The component will become visible beginning from the top corner until it reaches its full width; then the component will become visible beginning from the top corner, until it reaches its full height.

- **Effect Duration**

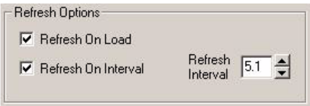
  Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Note. Do not link Display Status to a cell or range of cells already linked within the same component (for example, Display Data on a table, or the Data Value on a Single Value component). The overlap will cause one of your data sources not to refresh if changed dynamically.

See the Xcelsius online help for more information.

Refresh Options

Use the options in this section to configure when the data is automatically refreshed. Refreshing includes both sending the Send Ranges and loading into the Load Ranges.



Refresh Options

☑ Refresh On Load

☑ Refresh On Interval

Refresh Interval: 5.1

- **Refresh On Load**

  Select this check box to refresh the data once the generated application is loaded.

- **Refresh On Interval**

  Select this check box to automatically refresh the data at a given interval. The interval is specified by the **Refresh Interval**.

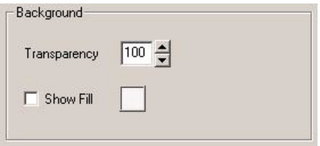
- **Refresh Interval**

  Use this option to adjust the time (in seconds) between each automatic refresh. Enter the desired value in the text box, or use the up/down arrows to adjust the value.

Appearance

Background

Use the options in this section to configure the appearance of the button.


Background

Transparency 100

☐ Show Fill

- **Show Background**

  Select the Show Background check box to show a background with the URL link button. By unchecking this, you can create a text-only link. You can also uncheck this and place the transparent URL button over an imported image to create a custom URL link button.

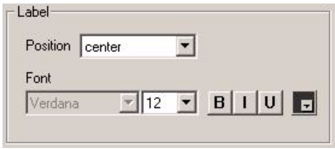
- **Use Custom Fill Check box**

  Select the Use Custom Fill check box to change the background color of the button to the Fill Color.

- **Fill Color**

  Use this option to change the background color of the button. You can achieve a variety of different looks by adjusting this color.

Label Use the options in this section to configure the appearance of the button label.



Label

Position: center

Font: Verdana 12

- **Alignment**

  Positions the label within the button. Choose from left, center, or right.

- **Font Settings**

  Configures the font for the title text. See the online help for more information about font settings.

9

Chapter 9:
Tool Reference

This chapter contains the following sections:

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Toolbar . . . . page 490
Components . . . . page 494
Object Browser . . . . page 495
Global Styles . . . . page 496

Menus

File Menu (ALT+F)

New (CTRL+N)

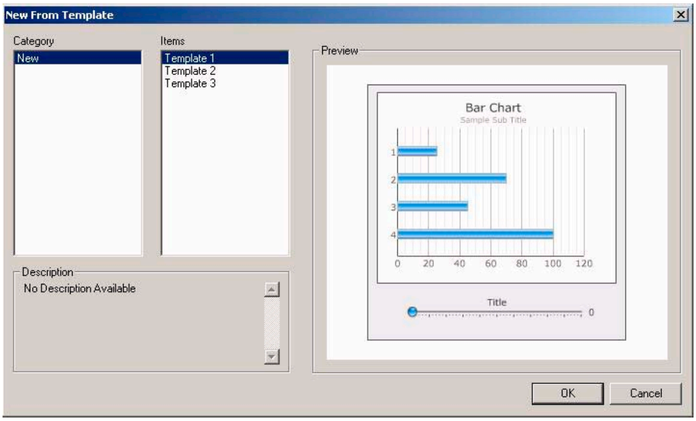
You can create new Xcelsius content by selecting **New** from the **File** menu.

You can also use the toolbar button (shown in the margin).

New From Template (CTRL+T)

Templates are pre-defined Xcelsius models you can use as a starting point for creating more complex content.

1. Select File, New From Template. A Template File Browser will open with which you can select your Template choice.



Description: No Description Available

2. Select the Template Category, followed by the Item. As you highlight different Items, a preview of that Template appears in the Preview window.

3. Finalize your selection by clicking OK.

Open (CTRL+O)

With the Open function, you can open existing Xcelsius content (XLF files).

1. Select File, Open.
2. Choose the file you wish to open with the file browser dialog.

You can also use the toolbar button (shown in the margin).

Save (CTRL+S) Save As

You can save Xcelsius content (XLF files) by selecting Save from the File menu.

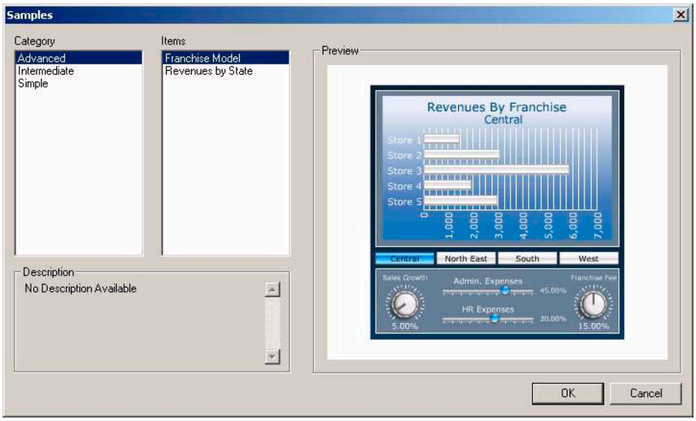
Successive Save commands will save to the current working file. If you wish to save to a new file, select File, then Save As.

You can also save your content by clicking on the Save button on the toolbar (shown in the margin).

Samples

Samples are fully functional Xcelsius models tied to Excel data. The samples provided showcase some of the possible applications that can be built using Xcelsius.

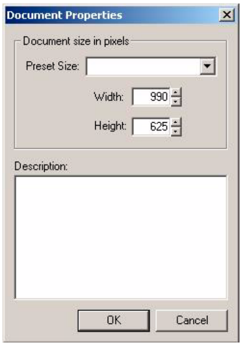
1. Select File, Samples. A Samples File Browser will open with which you can select your Sample choice.



2. Select the Category, followed by the Item. As you highlight different Items, a preview of that Sample appears in the Preview window.
3. Finalize your selection by clicking OK.

Properties

With the Document Properties dialog, you can control canvas size and enter a document description.



Width: 990

Height: 625

Select File, Properties, and choose from the following:

- **Document Size**
  Controls canvas size in two ways. You can select a preset dimension from the Preset Size combo box, or you can enter a custom width and height in the fields provided. All dimensions are in pixels.
- **Description**
  Use to enter a document description which will be saved with your Xcelsius XLF file.

Export Settings

The Export Settings function displays the export settings dialog. The selections made on this dialog will determine the structure of the Macromedia Flash (SWF) file that is generated using the Export function. See “Updating Data for a Model” on page 46 for more information on using these features.

The Export Settings also include options to allow you to configure the model to collaborate using a Macromedia Flash Communication Server.

Select File, Export Settings.

Note. For more detailed information on this functionality see “Updating Data for a Model” on page 46.

Note. For more detailed information on collaboration see "Using Collaboration" on page 209.

Export Preview

With the Export Preview function, you can preview the Macromedia Flash (SWF) file that will be generated based on the current Export Settings. Selecting this option will open a new window that displays the Macromedia Flash (SWF) file generated based on the current export settings.

Select File, Export Preview.

Export

With the **Export** function, you can export the current model via one of the five submenu choices: Macromedia Flash (SWF), HTML, PowerPoint slide, Plumtree, or Outlook. The model will be exported based on the current Export Settings.

Select **File**, **Export**.

See "Chapter 6: Publishing Models" on page 231 for more information.

Note . A Macromedia Flash (SWF) file cannot be loaded into Xcelsius for editing.

Send To

With the Send To function, you can send the current document to either PowerPoint or Outlook. These 2 menu options function the same as the Send To PowerPoint and Send To Outlook toolbar shortcuts (shown in the margin). See "Chapter 6: Publishing Models" on page 231 for more information.

Select File, Send To, then choose a send method.

Snapshot

With the Snapshot function, you can export the current model via one of the five submenu choices: Back to Excel, Macromedia Flash (SWF), HTML, PowerPoint slide or Outlook. The PowerPoint slide and Outlook submenu options function the same as the Send To PowerPoint and Send To Outlook toolbar shortcuts (shown in the margin). See "Taking a Snapshot of Your Model" on page 232.

Select File, Snapshot, then choose a snapshot option.

Back to Excel

The Export Back to Excel functionality extracts the model that was previously imported, if there was one. This may be useful if you no longer have the original Excel file that was used to create the model, or if someone sent you a XLF file and you need to see the spreadsheet used to create it.

On the File menu, click Back to Excel.

Edit Menu (ALT+E)

Undo (CTRL+Z) Redo (CTRL+Y)

Canvas actions that involve editing or sizing components are buffered by Xcelsius. With the Undo and Redo commands, you can access this buffer.

Select Edit, and choose from the following:

- **Undo**
  Removes a canvas action.
- **Redo**
  Retrieves a canvas action that has been removed with Undo.

Cut (CTRL+X)

The Cut command will remove the current component selection and buffer it for pasting. Use either of the following methods:

- Select Edit, then Cut from the menu
- Right-click the selection and choose Cut from the drop-down menu.

You can also use the toolbar button (shown in the margin).

Copy (CTRL+C)

With the Copy command, you can make a copy of the current component selection and buffer it for pasting. Use either of the following methods:

- Select Edit, then Copy from the menu
- Right click the selection and choose Copy from the drop-down menu.

You can also use the toolbar button (shown in the margin).

Paste

(CTRL+V)

With the Paste command, you can place a copy of the current contents of the copy buffer on the canvas. Use either of the following methods:

- Select Edit, then Paste from the menu
- Right click the selection and choose Paste from the drop-down menu.

You can also use the toolbar button (shown in the margin).

Delete

(Del)

With the Delete command, you can remove the current component selection from the canvas. Use either of the following methods:

- Select Edit, Delete
- Right-click the selection and choose Delete.

Select All

(CTRL+A)

With the Select All command, you can place all components on the canvas into the current selection.

Select Edit, Select All.

Properties

(CTRL+Enter)

With the Properties command, you can display the component properties in several ways.

Note. You can edit properties for only one component at a time.

Use one of the following methods:

- Select Edit, Properties
- Right-click the component and select Properties from the drop-down
- Double-click the component.

See “Using the Components Property Window” on page 28 for more information about using the property window. See “Chapter 8: Component Reference” on page 251 for more information about component properties.

Data Menu (ALT+D)

Import Model

With the Import Model function, you can bring data and formulas from an Excel spreadsheet into your Xcelsius model.

Select Data, then Import Model.

You can also use the toolbar button (shown in the margin).

Caution. Re-importing a file could cause problems with existing data sources if they contain formulas that can change. Unless you are importing the same file with a few minor modifications, it is recommended that you clear all data sources when re-importing.

Replace Data Selection

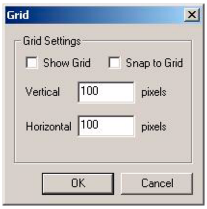
The Replace Data Selection function displays the replace data selection dialog. The selections made on this dialog will determine the data that gets replaced when the Macromedia Flash (SWF) file is exported. See “Using the Data Replace Option” on page 49.

Select Data, Replace Data Selection.

View Menu

Grid (Ctrl+G)

The Grid is a layout tool that can aid in positioning components on the canvas. You can control Grid functions with the Grid dialog.



Grid

Grid Settings

☐ Show Grid ☐ Snap to Grid

Vertical 100 pixels

Horizontal 100 pixels

Select View, Grid choose from the following:

- **Show Grid**
  Shows the grid on the canvas when enabled.

- **Snap to Grid**
  Aligns the currently selected components to the grid when enabled. The top left of the selected objects aligns to the closest grid lines.
- **Grid Dimensions**
  Vertical and Horizontal edit boxes control the size of the Grid. The Grid dimensions are in pixels.

Switch To/ Retry Dialog

With the **Switch To/Retry Dialog** toggle, you can enable/ disable the switch to/retry dialog from appearing.

Select **View**, then **Switch To/Retry Dialog** from the menu.

Checked means the Switch To/Retry Dialog will appear when Excel is busy. Unchecked means that the application will not display the switch to/retry dialog. Unchecking this means that Xcelsius will wait for Excel and appear to hang if Excel is busy.

Format Menu (ALT+O)

Align

With the Align functions, you can align the bounding boxes of components or groups of components relative to the first component in the current selection. Align functions require the selection of at least two components.

Select Format, Align, and choose from the following:

- **Left**
  Aligns the horizontal position of the selected objects, putting the left edges in line with the first selected object.
- **Center Horizontal**
  Aligns the horizontal position of the selected objects, putting the horizontal center in line with the first selected object.
- **Right**
  Aligns the horizontal position of the selected objects, putting the right edges in line with the first selected object.
- **Top**
  Aligns the vertical position of the selected objects, putting the top edges in line with the first selected object.

- **Center Vertical**
  Aligns the vertical position of the selected objects, putting the vertical center in line with the first selected object.
- **Bottom**
  Aligns the vertical position of the selected objects, putting the bottom edges in line with the first selected object.

Make Same Size

With the Make Same Size functions, you can use the first object selected to make selected objects the same size in the dimension you select.

Select Format, Make Same Size, and choose from the following:

- **Width**
  Makes the width of selected objects the same as the first.
- **Height**
  Makes the height of selected objects the same as the first.
- **Both**
  Makes the height and width of selected objects the same as the first.

Space Evenly

With the Space Evenly function, you can distribute a selection of components either horizontally (Across) or vertically (Down) so that there is even space between them.

Select Format, Space Evenly, and choose from the following:

- **Across**
  Spaces components evenly between the left and right objects.
- **Down**
  Spaces components evenly between the top and bottom objects.

Center in Document

With the Center in Document functions, you can center selected objects to the middle of the canvas.

Note. The Center in Document functions use the composite bounding box of the selection to center and not the individual objects.

Select Format, Center in Document, and choose from the following:

- **Vertical**
  Aligns the middle of the selected objects to a vertical line in the middle of the canvas.
- **Horizontal**
  Aligns the middle of the selected objects to a horizontal line in the middle of the canvas.
- **Both**
  Aligns the middle of the selected objects to the midpoint of the canvas.

Bring to Front (CTRL++) Send to Back (CTRL+-) BringForward (+) Send Back (-)

With Layer Options, you can bring a single component forward or back in layers when objects overlap.

Select Format, and choose from the following:

- **Bring to Front**
  Brings component to the topmost layer.
- **Send to Back**
  Sends component to the bottom layer.
- **Bring Forward**
  Brings component forward one layer.
- **Send Back**
  Sends component back one layer.

Group

With the Group function, you can join selected components into one group. You can manipulate and edit a group as you would a single object with the exception of changing component properties.

Select Format, and then Group, to join selected components into one group.

You can also use the toolbar button (shown in the margin) to group objects.

Ungroup

With the Ungroup function, you can separate previously grouped objects so that they can be manipulated individually.

Select Format, and then Ungroup, to separate previously grouped objects.

You can also use the toolbar button (shown in the margin) to ungroup objects.

Toolbar

New

You can create new Xcelsius content by clicking the button shown in the margin.

You can also create new content by selecting **New** from the **File** menu or pressing CTRL+N.

Open

With the Open function, you can open existing Xcelsius content (XLF files).

1. Click the toolbar button shown in the margin
2. Choose the file you wish to open with the file browser dialog.

You can also select File, Open or press CTRL+O.

Save

You can save Xcelsius content (XLF files) by selecting Save from the File menu.

- Select File, and then Save.
- Successive Save commands will save to the current working file. If you wish to save to a new file, select File, then Save As.

You can also save your content by clicking on the Save button on the toolbar.

Note. The keyboard shortcut for Save is Ctrl+S.

Cut

The Cut command will remove the current component selection and buffer it for pasting. Use the toolbar button shown in the margin.

You can also use any of the following methods:

- Select Edit, then Cut from the menu
- Right-click the selection and choose Cut from the drop-down menu.
- Click the selection and press CTRL+X.

Copy

With the Copy command, you can make a copy of the current component selection and buffer it for pasting. Use the toolbar button shown in the margin.

You can also use any of the following methods:

- Select Edit, then Copy from the menu
- Right click the selection and choose Copy from the drop-down menu.
- Click the selection and press CTRL+C.

Paste

With the Paste command, you can place a copy of the current contents of the copy buffer on the canvas. Use the toolbar button shown in the margin.

You can also use any of the following methods:

- Select Edit, then Paste from the menu
- Right click the selection and choose Paste from the drop-down menu.
- Click the selection and press CTRL+V.

Selection Tool

With the Selection Tool you can select single, or multiple components.

Choose the Selection Tool from the toolbar (shown in the margin). Then either:

1. Select a single component by left-clicking the component.

2. Select multiple components by dragging the selection rectangle.

Component Tool

With the Component Tool, you can place the component currently selected in the Components dialog (if any) on the canvas (see “Components” on page 494 for more information). Use the toolbar button shown in the margin.

Increase/ Decrease Canvas Size

With the Increase Canvas and Decrease Canvas toolbar buttons, you can increase or decrease the canvas size.

From the toolbar, select:

- The Increase Canvas toolbar button (shown in the margin) to increase the canvas size in increments of 10 pixels.
- The Decrease Canvas toolbar button (shown in the margin) to decrease the canvas size in decrements of 10 pixels.

Fit Canvas to Components

With the Fit Canvas to Components toolbar function, you can resize the canvas to match the width and height of the composite size of all components on the canvas. Use the toolbar button shown in the margin.

Fit Canvas to Window

With the Fit Canvas to Window toolbar function, you can resize the canvas to the size of the window. Use the toolbar button shown in the margin.

Group

With the Group function, you can join selected components into one group. You can manipulate and edit a group as you would a single object with the exception of changing component properties.

Select two or more components, then click the group button on the toolbar (shown in the margin).

You can also select Format, Group, to join selected components into one group.

Ungroup

With the Ungroup function, you can separate previously grouped objects so that they can be manipulated individually.

Select grouped components, then click the Ungroup toolbar button (shown in the margin) to separate a group.

You can also select Format, Ungroup to separate previously grouped objects.

Help

The Xcelsius help file provides information about the elements of an Xcelsius model and instructions for how to work with the application. Use the toolbar button shown in the margin.

You can also select Help, Contents.

Import Model

With the Import Model function, you can bring data and formulas from an Excel spreadsheet into your Xcelsius model. Use the toolbar button shown in the margin.

You can also select Data, Import Model.

Caution. Re-importing a file could cause problems with existing data sources if they contain formulas that can change. Unless you are importing the same file with a few minor modifications, it is recommended that you clear all data sources when re-importing.

Enable Macromedia Flash (SWF) preview mode

To change between Edit and Preview modes, toggle the preview button located on the toolbar on the main window. By default, the application starts in Edit mode:

- You can edit your Xcelsius document in the default Edit mode.
- You can test a functioning version of the model before you publish it in Preview mode.

Send To PowerPoint

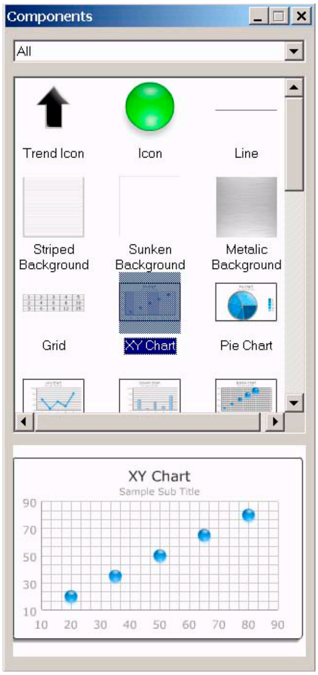
With the Send to PowerPoint function, you can embed the flash movie into a PowerPoint slide.Use the toolbar button shown in the margin.

Send To Outlook

With the Send to Outlook function, you can create a new mail message with the flash movie attached. Use the toolbar button shown in the margin.

Components

With the Components Dialog, you can select components that you wish to place on the canvas.



The Components Dialog is opened by default when you start an Xcelsius session. It is divided into three sections:

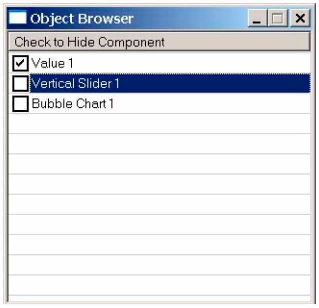
- **Category Selection**
  Uses a drop-down list to filter the Component Selection to specific categories.
- **Component Selection**
  Displays a list of components of a particular category. By default, all components are displayed for selection.
- **Component Preview**
  Lets you preview the currently highlighted component.

See “Using the Components Dialog” on page 17 for more information about using this dialog.

See "Chapter 8: Component Reference" on page 251 for more information about component properties.

Object Browser

With the Objects Browser, you can select components, hide them, and rename them.

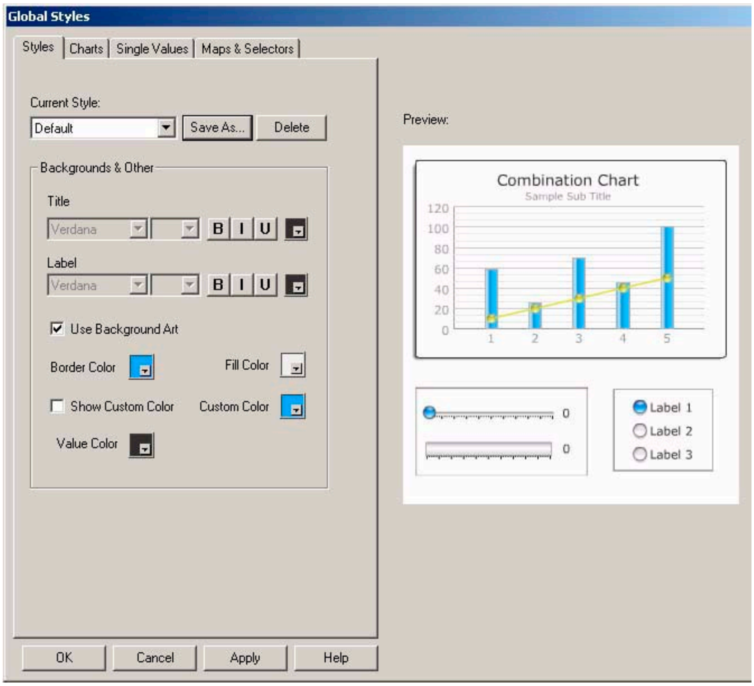


The Object Browser is opened by default when you start an Xcelsius session. You can do the following:

- **Selecting Components**
  Click the component name to select the component on the canvas. You can select multiple components by clicking on the component name while holding down the Ctrl key. You cannot select a component that is marked as hidden.
- **Hiding Components**
  Select the checkbox next to a component name to hide or un-hide components. Hide multiple components by clicking on any of the checkboxes of a multiple selection.
- **Renaming Components**
  Each component is assigned a name when you place them on the canvas, but you can override these names to provide your own. Double click on the component name in the Object Browser to rename components. You cannot rename a component that is marked as hidden.

Global Styles

With **Global Styles** you can globally adjust element colors and appearance defaults of components.



Current Style: Default

Title: Verdana

Label: Verdana

☑ Use Background Art

☐ Show Custom Color

The **Global Styles** dialog is found under the **View** menu in the main toolbar of Xcelsius. It is divided into four tabs based on the four major component categories.

- **Styles**: **Current Style** lists the available global styles. A global style determines the overall appearance of your components by providing a predefined set of colors, sizes, and default appearance parameters. If you modify a predefined style by changing any individual feature of the style, it automatically becomes a custom style. You can apply and/or use the modified style as the current theme during a session of Xcelsius, but it will not persist until you save it. Selections made in the list box will load different styles and allow you to preview the colors in the dialog. Clicking **OK** will validate your the style selected in the **Current Style** combo box. Any components placed on the canvas after the Current Style has been selected will reflect this style. With the **Apply** button, you can change components already on the canvas to the style selected. Note that by selecting Apply you are invoking a change to the component appearance parameters that cannot be undone. Moreover, Apply does not set the current style for new components. Only OK can set a new current style.

- The **Default** style is the preset style for all components of Xcelsius. It is the style when Xcelsius is loaded. The default style cannot be deleted or overwritten.
- **Browse...** This option in the Current Style list box allows you to search of a style in another directory. Choosing **Browse...** will open a standard file dialog with which you can load style files from any directory on your computer.
- **Save As**: Allows you to save a modified style. You can save style files any directory. Choose **Browse...** to load a style that is not saved to the Styles directory. You cannot override the **Default** style.
- **Delete**: Allows you to delete a style. **Delete** will remove the file associated with the currently selected style in the Current Style list box.
- **Preview**: The **Preview** window gives instant visual feedback on the working style. As you load styles or modify the style in the dialog, the components in the **Preview** window will update with the changes.
- **Style Categories**
    - **Backgrounds & Other**: Style parameters on this tab will affect components that fall into Backgrounds and Other component categories. If you have Xcelsius Professional Edition, **Collaboration** components also fall into this style category.
    - **Charts**: Style parameters on the Charts tab control the default appearance parameters of all Chart components. Chart Style parameters closely match those

  found on individual Chart properties. For more information on each parameter, see the reference for Chart appearance.

  - **Single Values**: Style parameters on the Single Values tab control the default appearance parameters for all Single Value components. Single Value style parameters closely match those found on the individual Single Value properties. For more information on each parameter, see the reference for Single Value appearance.
  - **Selectors**: Style parameters on the Selectors and Maps tab control the default appearance parameters for all Selectors and Map components. These parameters closely match those found on the individual Selector and/or Map properties. For more information on each parameter, see the reference for Selector or Map appearance.
- **OK**: Clicking **OK** will close the Global Styles dialog and set the Current Style for the tool. Any new components placed on the canvas will fall under that Current Style.
- **Cancel**: The **Cancel** button will invalidate any style selections you have made in the Global Style dialog, and keep whatever the Current Style was prior to opening the Global Styles dialog.
- **Apply**: This feature allows you to apply the Style you've selected in the Global Styles dialog to whatever existing model is currently on the canvas. Note that this does not set the Current Style for the tool; the Current Style has affect over all new components placed on the canvas. **Apply** merely sets a style over existing components.
- **Help**: Brings up the document help.

10

Chapter 10: Excel Functions

This chapter contains a list of the Microsoft Excel functions Xcelsius supports.

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ATAN
ATAN2
ATANH
AVEDEV
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AVERAGEA
CEILING
CHOOSE
COMBIN
CONCATENATE
COS
COSH
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COUNTA
COUNTIF
DATE
DATEVALUE
DAVERAGE
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DAYS360
DB
DCOUNT
DCOUNTA
DDB
DEGREES
DEVSQ
DGET
DMAX
DMIN
DOLLAR
DPRODUCT
DSTDEV
DSTDEVP
DSUM
DVAR
DVARP
EDATE
EOMONTH
EQUALS
EVEN
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EXPONDIST
FACT
FALSE
FISHER
FISHERINV
FIXED
FLOOR
FORECAST
FV
GEOMEAN
HARMEAN
HLOOKUP
HOUR
IF
INDEX
INT
INTERCEPT
IPMT
IRR
KURT
LARGE
LN
LOG
LOG10
MATCH
MAX
MEDIAN
MIN
MINUTE
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SUMXMY2

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